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HAND-BOOK
ON THE
TREATMENT OF THE HORSE.



EASY AND CONTROLLING SEAT OF LADY AND GENTLEMAN.

[FRONTISPIECE.]

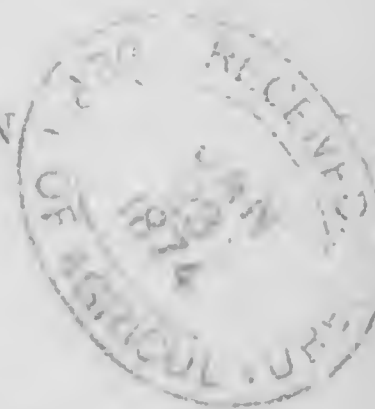
HAND-BOOK

TREATMENT OF THE HORSE

AND ON THE ROAD;

FOR HORSE OWNERS.

BY
CHARLES WHARTON



THE UNIVERSITY
J. B. LIPPINCOTT & CO.



EASY AND CONTROLLING SEAT OF LADY AND GENTLEMAN

HAND-BOOK
ON THE
TREATMENT OF THE HORSE
IN THE
STABLE AND ON THE ROAD;
OR,
HINTS TO HORSE OWNERS.

BY
CHARLES WHARTON

WITH NUMEROUS ILLUSTRATIONS.

PHILADELPHIA:
J. B. LIPPINCOTT & CO.
1873.



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TO THE
PHILADELPHIA RIDING CLUB
THIS LITTLE VOLUME
IS
RESPECTFULLY DEDICATED
BY THE AUTHOR.

PREFACE.

So many books have been written upon this subject, that the present writer would not have taken upon himself the task had he not been applied to so often within the last few years concerning certain ailments among horses, and for treatment of the same. The experience of Baucher is very valuable, but unfortunately very little understood; furthermore, he treats only of the management of the horse and not of his diseases. Of the correctness of his system there can be no doubt, but it requires such an amount of study and labor to acquire the knowledge which his book is intended to convey, that not one gentleman in a hundred who reads it is materially benefited by its perusal, or can practically apply what he has read. If only partially understood, he had better know nothing more than the simple process of mouthing, flexing, and causing the legs to move backwards, sideways, and forwards, at his desire. This part of his system is condensed in as plain language as possible in the present volume, and is enough for all practical purposes.

It is proposed in this work to treat of all the slight diseases horses are heir to, cures for the same, and their

general treatment, so that by reference to the contents a gentleman can discover, in ordinary cases, the nature of his horse's ailment, and give his directions accordingly, thereby becoming himself master of the situation.

It is not here intended to underrate the skill of a good veterinary surgeon, only to dispense with the necessity of sending for him on all trifling occasions.

The writer has searched for this desirable information, without success, in the many books already published; being himself a lover of horses, and having some knowledge of the animal's habits and requirements, and knowing that many of his diseases are occasioned by ignorance of the simplest rules of health, neglect, or bad treatment, he undertakes the present work. It is with an earnest desire to alleviate the sufferings of this most valuable animal, as well as to assist his owners, that he gives some plain directions with regard to his treatment in and out of the stable.

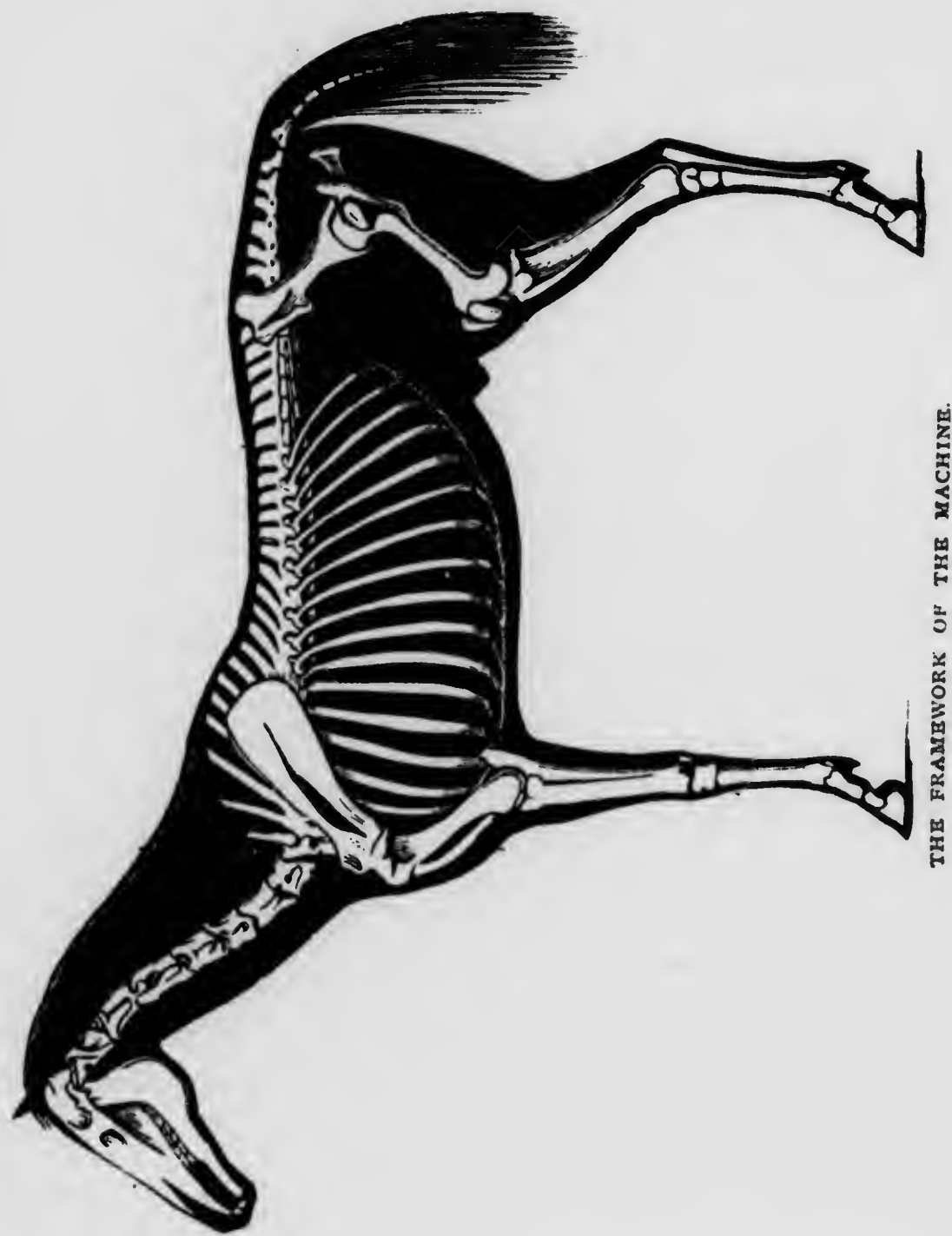
C. W.

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THE FRAMEWORK OF THE MACHINE.

ON THE TREATMENT OF THE HORSE.

CHAPTER I.

ON THE PURCHASE OF THE HORSE.

BEFORE speaking about the diseases, treatment, riding and driving, and care of the horse, my reader may say, "Let me have one, tell me how to buy him, what are the points to be regarded, and how am I to examine him all over, etc.?"

It is not to be expected that any person entirely unacquainted with horses, their conformation, constitution, and qualities, can by the mere perusal of books make himself a judge, or in fact know enough on his own judgment to buy without the risk of being terribly taken in; for the reason that it takes half a lifetime of careful observation, and a retentive memory, with some innate horse-proclivity, to get sufficient knowledge. Nor is it every man who, with all that care and observation, will have the knowledge to buy a horse without some risk. Therefore I think it well to have a friend with you who knows more than yourself.

Some men may be with horses all their lives and yet know nothing about them. It is true a man with some fondness for horses may gain a little knowledge from books, and, when assisted by a friend as described above, may make a very good purchase.

Very many prefer purchasing from a farmer or a breeder,

but I prefer going at once to a well-known large and responsible dealer, one who lives by his business, and whose success depends greatly on his integrity.

Tell him exactly what you want a horse for, how much speed you want, whether you want him for light harness or a family wagon, for saddle, or whether for a horse of all work. He will then look around, and if he have such will tell you, and say, take him home and try him.



A SLANTING SHOULDER, SHOWING THE POSITION OF THE BONES.

A SLANTING SHOULDER IN ACTION.

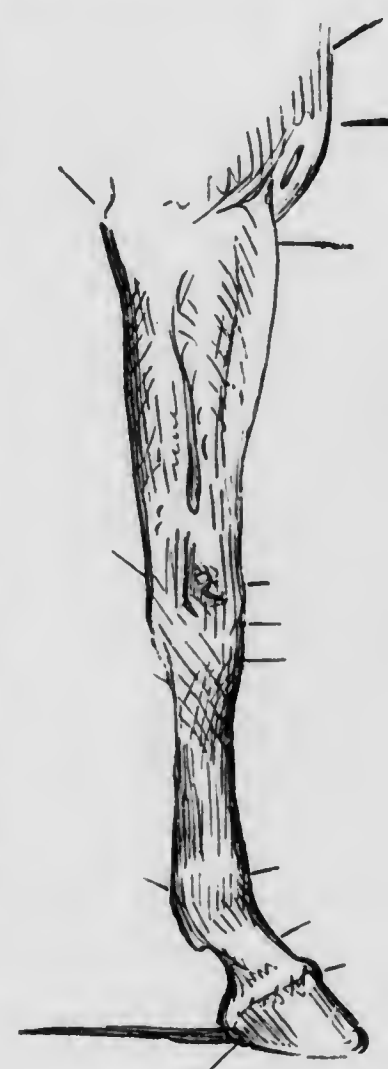
Then, although you have confidence in the seller, while you have him on trial, apply privately your own and friend's knowledge. For instance, the great usefulness of the horse depends upon his legs and wind-works, therefore we look to these first. The shoulder should be long and obliquely set, with considerable slope and high withers, the upper arm long and muscular, knee flat and bony,

cannon-bones short and flat, not round, with clean, strong sinews, pastern joint not very long and somewhat oblique, the feet always good size, large and round, or as nearly so as can be found,—they must be sound, no crack of any kind, no thrush, corn, or anything wrong with them,—the hind legs should be flat, quarters large, strong, and broad when looked at from his side, but square and solid from behind.

The hind feet should be similar in form to the front; no spavin, curb, or thoroughpin. Back should be shortish,—neither long nor short,—running well back to croup, that falling somewhat abruptly to root of tail; loins, if a little arched, will be an evidence of a strong back; barrel or body round, and well ribbed up. A close-ribbed horse is generally the easiest keeper.

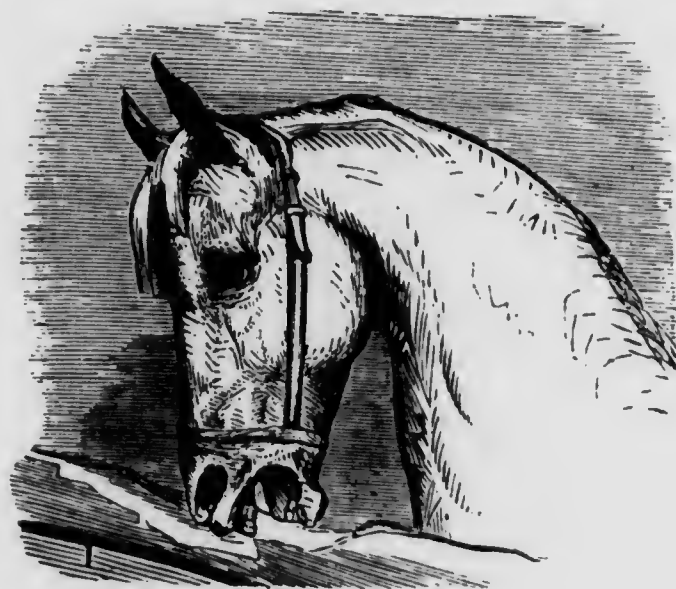
Neck moderately long, convexly arched from shoulder to crest, thin where it joins the head, and that so set on that when it yields to the pressure of the bit it forms somewhat of a semicircle, bringing the chin in and downward near the chest.

Very little trouble attends the fore management of horses whose heads and necks are thus proportioned. The throttle should be well opened, and space between the points of lower jaw wide, say three inches; head should be long and lean, not beefy, broad between eyes, neither basin-faced or Roman-nosed, but a happy



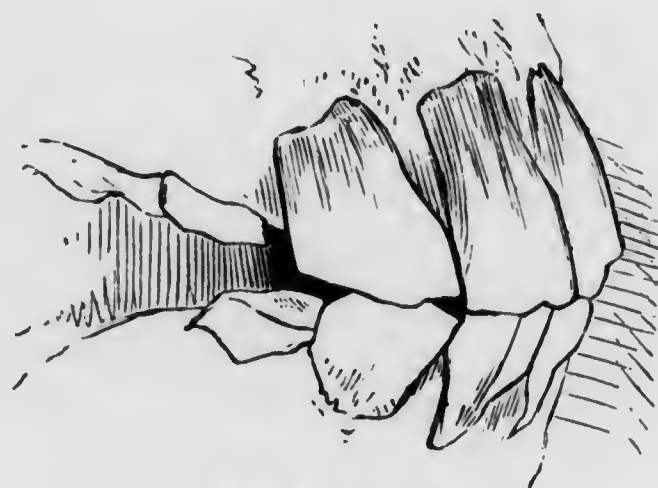
A HORSE'S FORE LIMB.

medium ; ears fine, short, and pointed ; eyes large, clear, and prominent ; nostrils, wide and well-opened.



Such a horse, if free from physical defects or vice, cannot fail, but must be a good one for almost any required purpose.

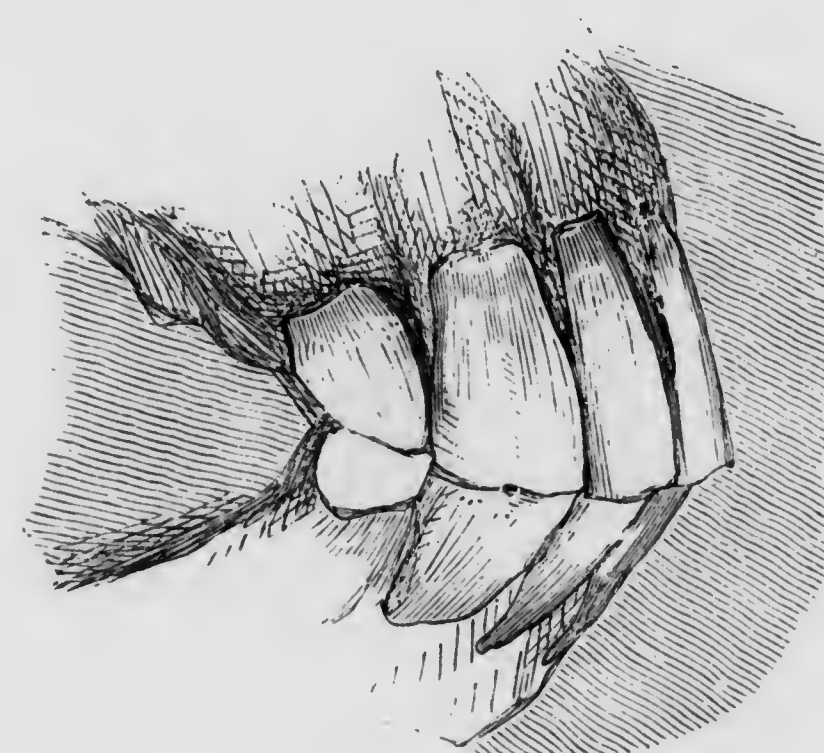
His eyes of course must be very carefully examined for



FOUR YEARS OLD.

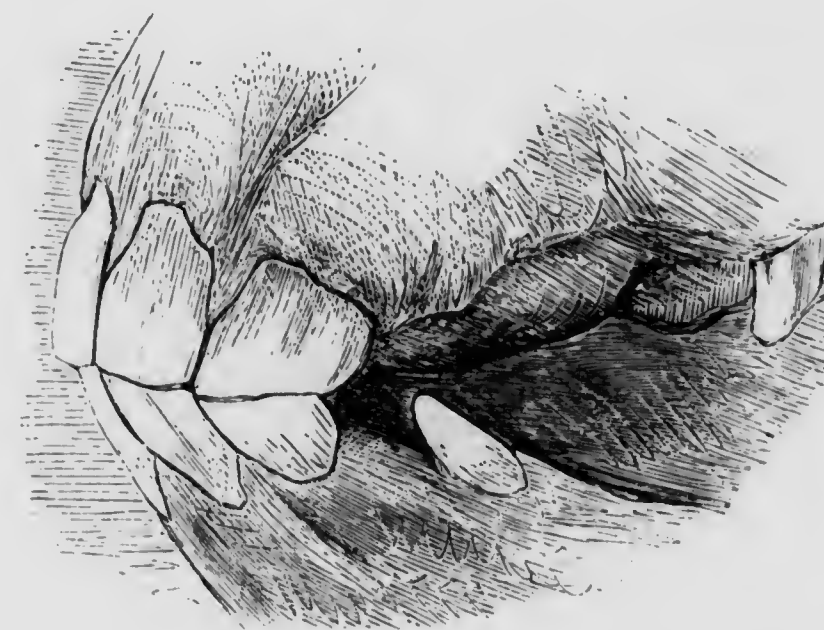
any evidence of inflammation ; if found, it is objectionable, though it may be accounted for by the seller as arising from some outside cause ; but still it is always objectionable.

Of the manner of testing his age I will now speak. It is to be presumed that a horse is not bought for pleasure



FIVE YEARS OLD.

One upper corner permanent incisor has been cut. The lower corner milk incisor is still retained.

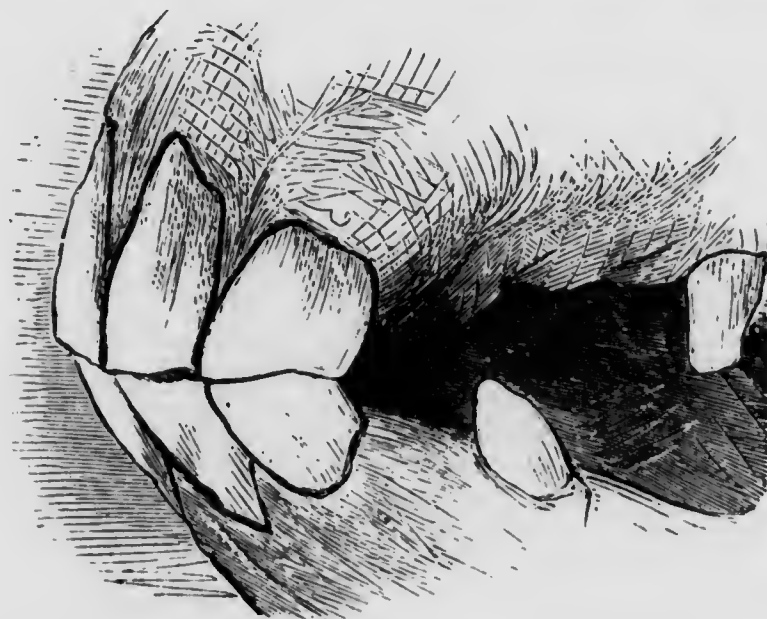


SIX YEARS OLD.

purposes until he is at least five years old, as between four and five years the mouth becomes full, and from a colt he

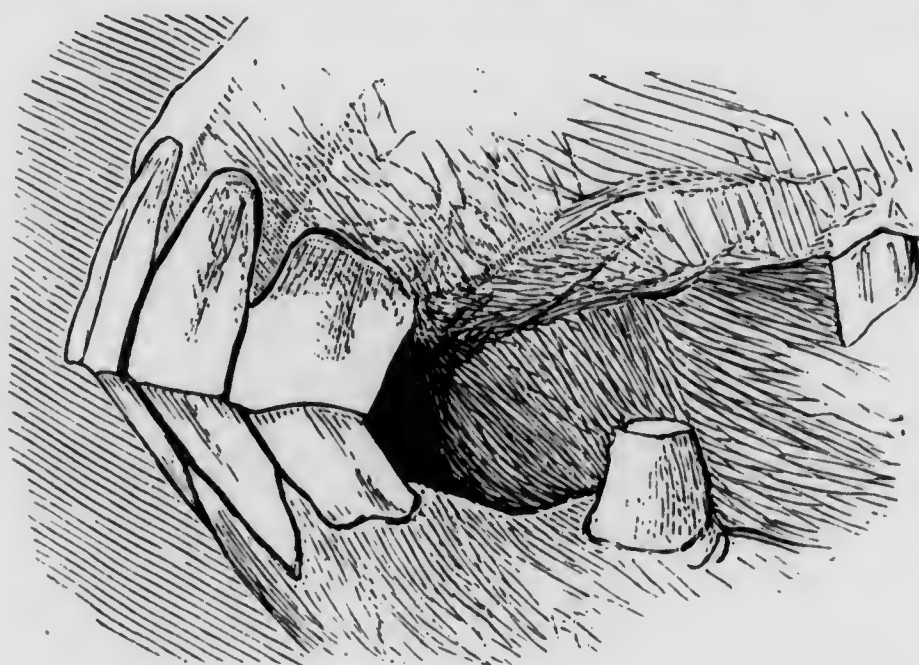
becomes a horse, and between four and five should be used very carefully and moderately.

Supposing him to be five years old, his mouth is full,



SEVEN YEARS OLD.

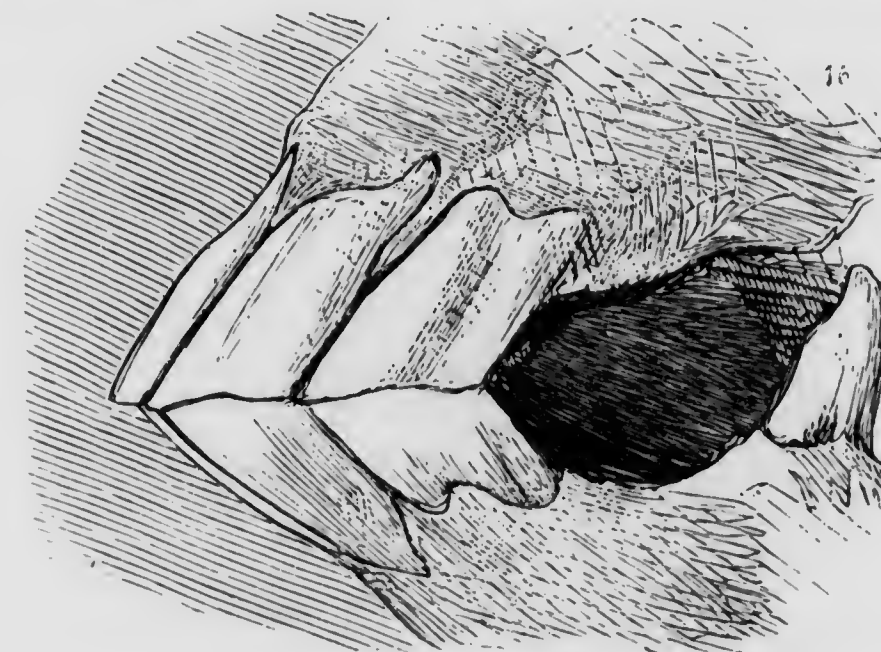
and his tush considerably but not fully grown. At six the tush is full grown, flat, and sharp, and there is a little de-



EIGHT YEARS OLD.

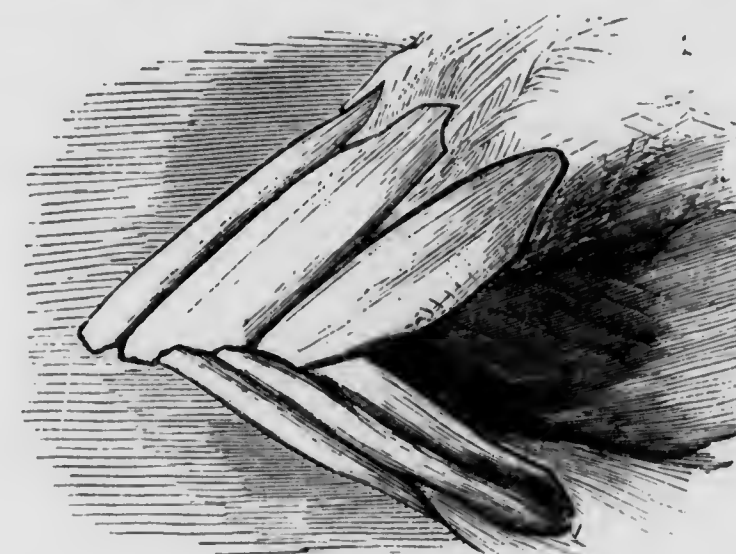
pression in the centre of the front teeth; the profile of his mouth at six years exhibits his teeth in a firm, upright

position, which is lost as he grows older. At seven the tush is beginning to round a little, and the mark or depression in the four central nippers is somewhat worn out.



TWELVE YEARS OLD.

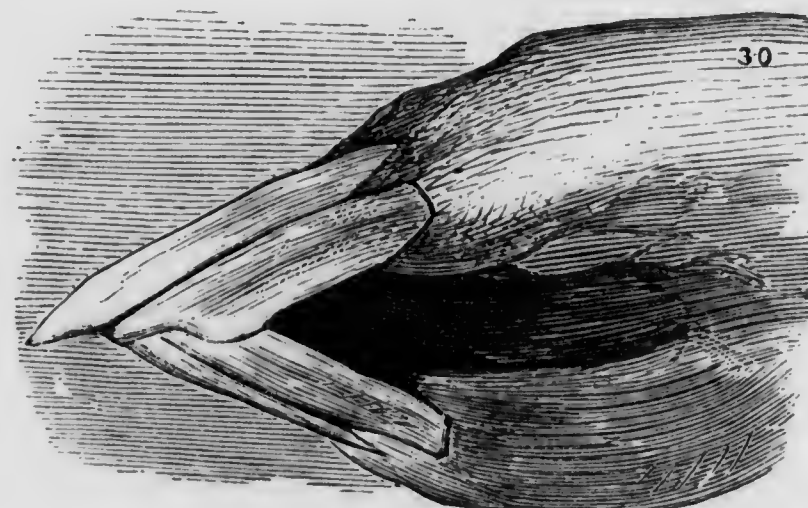
At eight the tush is rounder in every way, and the mark is gone from all the bottom nippers. At nine, and until ten, all marks on the nippers are gone and the tush per-



TWENTY YEARS OLD.

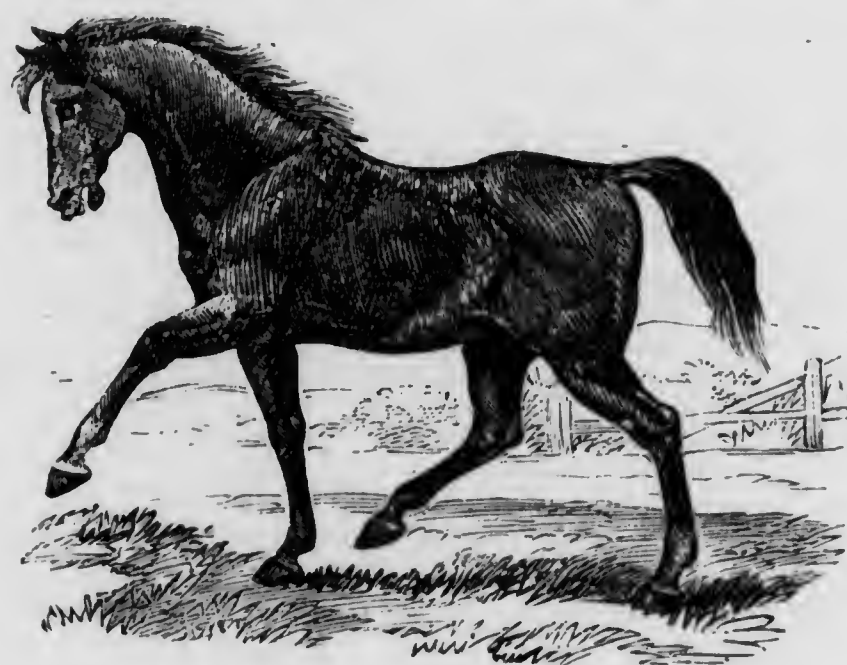
fectly round; after this it is a mere matter of conjecture, based upon the appearance of the front teeth, their length, slanting appearance, etc. It must here be observed that

mares have no tush, except an apology for one, which comes when she is about seven years old, and soon disappears.



THIRTY YEARS OLD.

So much concerning his age and the way to test it. For further information see Mayhew's "Horse Management, illustrated edition by J. B. Lippincott & Co.



A FAIR HORSE FOR SADDLE OR HARNESS.

His wind should also be carefully tested, as a horse with the slightest imperfection of wind-passages or lungs should be at once rejected; broken wind, heaves, or anything of that kind can be detected immediately by any

one knowing anything about horses. I would not advise any one to purchase a horse with anything the matter with his wind, as it is pretty sure to become worse.

It is well also to feel the pulsations of the horse's heart, inasmuch as a lurking disease may exist there of which the seller himself is ignorant. The best place to examine the beating of the heart is immediately behind the elbow, on the left side; the hand applied flat against the ribs will enable you to determine the number of pulsations. The ear also so applied will give you the regularity or irregularity of the same. A bounding action is an evidence of something wrong; a quickened and irregular respiration is also an evidence of disease. Just here a few words on the subject of the pulse: a horse's pulse in perfect health should beat about thirty-four times to the minute; to feel that, apply the finger to the lower jaw, where, or a little behind where the submaxillary artery, vein, and parotid duct come from under the jaw, or close up to the lower part of the neck, the pulse is easily counted and its character determined. On the side where some feel the pulse it can be counted, but its character not so well determined, as there is no hard body to press against, such as the jaw-bone. A pulse of forty-five to fifty-five indicates fever to some extent, from sixty to seventy-five a decidedly high case of fever, from that upwards it becomes more dangerous at every pulsation. A horse seldom lives after his pulse reaches a hundred. If the pulse is over forty or forty-five you had better reject him, in view of his being in a feverish condition. It is also important to know how to determine his pulse, as it may happen in the course of time, to save his life, that bleeding should be resorted to; then your knowledge will be of service in letting you know when he is becoming weak, as you should then stop the flow.

CHAPTER II.

CARE AND TREATMENT GENERALLY.—ON GROOMS AND STABLES.

HAVING spoken of the most important points to be looked at or decided upon, I will now suppose my reader in possession of one or more sound horses; the next important feature is to keep them so.

A good groom is indispensable. His attributes should be sobriety, carefulness, industry, honesty, truthfulness, and a fondness for and general knowledge of how to feed and clean his charges. On engaging him—supposing him to answer all the above requirements—make it the most important feature in your bargain (put it down in black and white for fear of any misunderstanding) that he is not to give medicine of any kind or in any shape to any of your horses without consulting you, not even flaxseed. A very common custom is, in the spring, when new horses come from the dealers, to give them a ball or two of flaxseed, either whole or ground, in order to make them shed quickly and look to the credit of the groom. This is all wrong. I have known many fine horses ruined by it, their pores are opened by such treatment, and cold and fevers often follow to their lasting injury. A little salt now and then, or clay, is all they want, with good care, regular feeding, rubbing, and careful examination of their feet.

1st. In the stable, the circulation of air should be good, without a possibility of the horse being subjected to a draught; the common plan—of a hole three or four inches wide by six high immediately in front of him, so that a

draught can strike him on the breast—is very wrong. Negligence in this matter is such a fruitful source of disease that I only wonder the practice is not discarded; as a draught to a horse, coming in heated and blown, is as injurious as the same to a man, and even more so, creating rheumatism, chills, and often a bad founder. Of the cause of the latter both the owner and groom are in ignorance; the former says he did not water him when warm, and the latter attests that he was careful also, yet the mischief is done. To prevent this the air-holes should be above the horse's head some feet,—I do not care how high, so that there are a sufficient number of them on both sides to create a current of air. Their height of course must be regulated by the ceiling: the higher you can get this the better, at least so high that in any sudden jerking up of the head the horse cannot by any possibility strike his pole or top of his head, as one or two such bumps will very likely produce poll-evil.

2d. The trough and hay-box should be boarded up entirely, making it impossible for him to get his legs, head, or neck under them; this is to prevent a cast and save him from serious injury. The finest mare I ever owned had her fore leg broken by such a cast. The hay-box should be free from anything like studding in front, and from every other hard substance, lest, in case of the horse throwing his head suddenly out of the box while feeding, he should come in contact with a piece of studding, which would produce, most likely, the same result as in the case of striking the ceiling, viz. poll-evil.

3d. As to the floor, generally this is all of plank. The horse is more easily kept clean about the legs, standing on a floor of plank, though at the expense of his feet it is true. The best plan is to have two stalls, one with a clay floor for day, and one with a plank floor for night. But

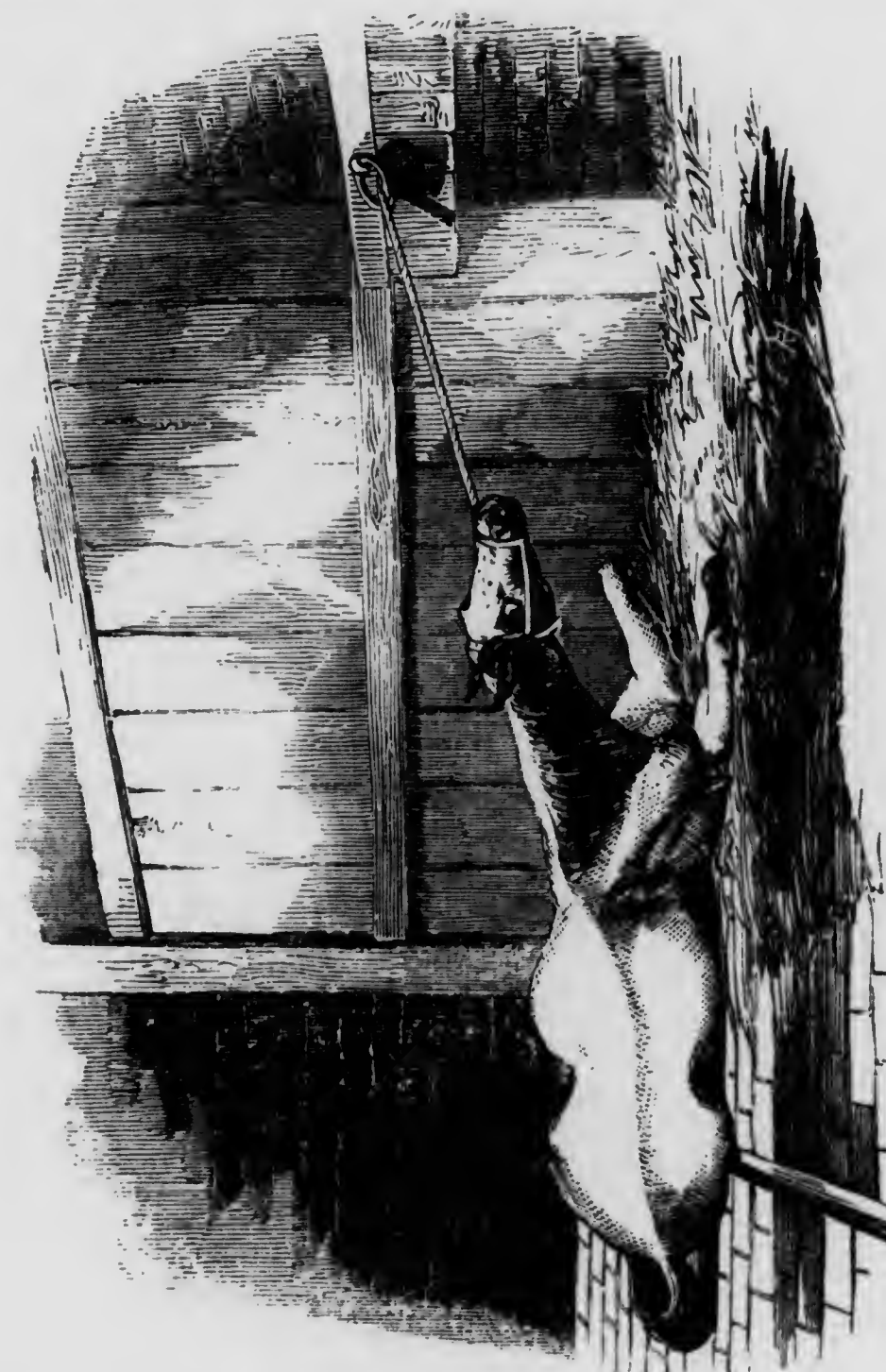
as this seems too much waste of room, especially in cities, where such a double amount of space is expensive, I propose to do with one stall, have that partly with a clay



CAST UNDER THE MANGER.

bottom, that is two feet back from the hay-box of clay; it need only be dampened, not wet or muddy, just to keep his fore feet cool. Then, plank from that back; just where plank joins the clay, run a narrow strip, half an inch high,

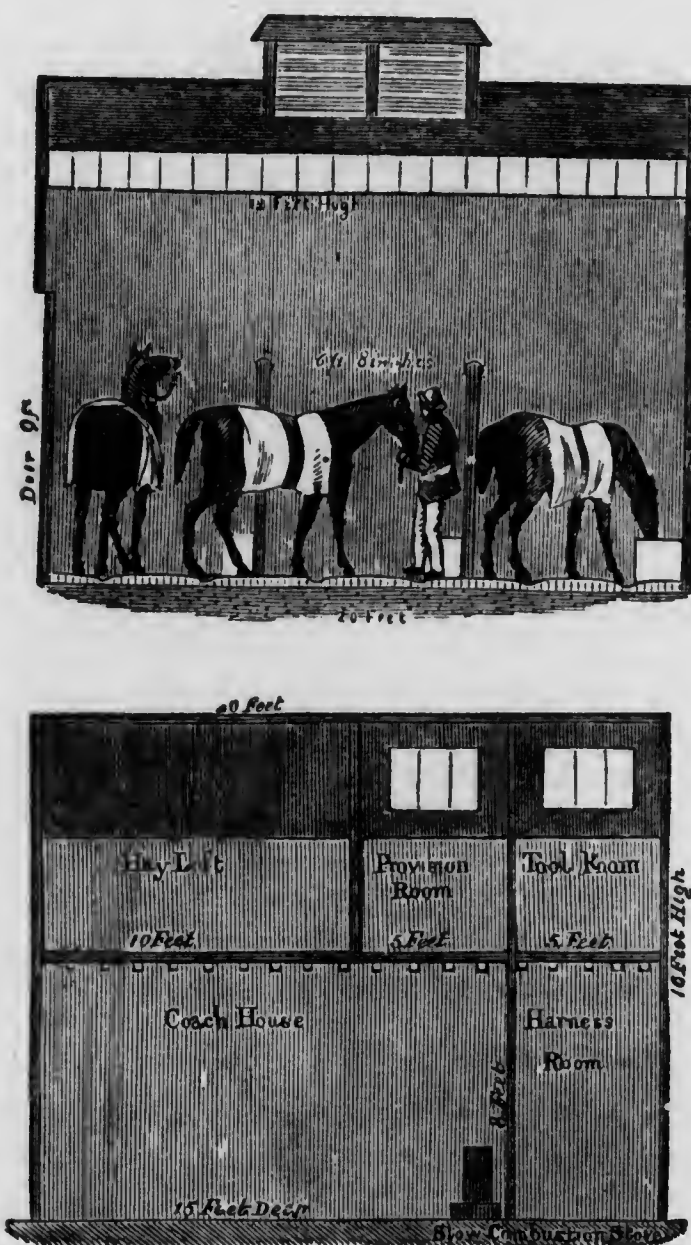
across, to keep the clay from working back; let the plank have sufficient fall to carry off the water, say two inches: the less fall the better, as the horse should stand on a



LYING ON THE GANGWAY.

perfect level; still, you must have enough to carry the water to a gutter behind the stall. The sides should be high enough to prevent any possibility of their biting one another, at least six and a half to eight feet in height. It is

not uncommon for one horse to bite the end off another's ear; it may be only for fun, but it makes an ugly-shaped ear, and has to be trimmed down into shape, and the



A MODERN STABLE, AS IT MAY BE ADAPTED AND IMPROVED.

other to match it must be cut in the same style. The stall should also be long enough to suffer the horse to lie in it, and not with his hinder parts out of it. Six and a half to seven feet from hay-box to end of stall is not too much. Many fine horses are ruined by getting their feet and legs in their neighbors' stalls, and in attempting to get

up slip again and again, and are sometimes strained across the loins and ruined for life. In a gentleman's stable, in England, they would have only three box-stalls where we have four common ones. Their hay-loft, instead of being above the stable, where it necessarily becomes more or less affected by the noxious gases from the stable, is situated on one side, and there is a stout partition between. The English box-stall is of all others the most conducive to a horse's comfort; he is not obliged to stand in all sorts of shapes to get himself level, and the floors being of small pebble stones nicely laid in clay, make a most durable floor as well as a cooling one for his feet. In this stall the horse has not a halter. In common stalls the halter should not be over three and a half feet from the chin-strap to the ring in box.

4th. *On Cleaning.*—The next thing to be considered is where and how should the horse be cleaned; not in his stall, but out of the stable, if that is possible, yet in an outside shed. In the stall, the dandruff or dust that your groom is working to get out of him to some extent necessarily settles back on him, but if cleaned outside it is blown off by the air. Half an hour is ample time to clean a horse for ordinary purposes.

First apply the curry-comb all over, and this should not be so sharp as to annoy the animal, but made sufficiently rough in the teeth to reach the skin and work up the dandruff to the surface; then apply a wisp of straw all over the body, head, and legs, then a good brushing, not with a soft brush, but one that reaches the skin and takes out with it the dust stirred up by the comb and wisp. Brush out mane and tail, and he is then ready for his day's work or feed, not omitting the cleaning out of his feet, particularly the front ones; his hind ones seldom require looking at. Any blacksmith can make you a hook

to use for this purpose ; I have never seen them for sale. Our charge being now ready for his feed, that must be regulated according to circumstances, size of the animal, and amount of labor he is called on to perform. As I am now simply treating of a gentleman's horse of all work, I can only give general instructions, to be altered to suit circumstances.

5th. *Feeding, Watering, and Dressing.*—First feed in the morning, a small wisp of hay, about one pound, after that four quarts of good oats, well sifted ; water before or after eating, as he seems to drink most satisfactorily to himself.

At noon his feed should be one pound of hay and only two quarts of oats, particularly if he is booked for an afternoon drive. At night when he comes in after a sharp drive, somewhat warm or blown, as soon as he is stripped, his head around his eyes and ears should be rubbed dry with either a cloth or wisp of straw,—a dry cloth should always be on hand. Wash out the mouth and nostrils ; give nothing to drink yet. Then straighten his hair all over with a card ; if he is very wet, rub his hair both ways with a wisp of straw or a hemp cloth before using the card. Never use the latter on his mane or tail, but use exclusively for laying and straightening his hair when warm. Now put him in his stall and give him one pound of hay ; while he is eating this, dry-rub his legs well. This has taken about half an hour ; you can feed him now or wait another half an hour, as you please. All danger from founder was over when he had eaten his hay ; he may now drink *ad libitum*. His night feed should be six quarts of oats and six or seven pounds of hay.

I prefer chop feed at night, two or three times a week, say half ship-stuff and half corn-meal or chopped oats mixed with a sufficient quantity of cut hay ; then the long

hay feed to be diminished in quantity as you feed the cut : this feed, of course, to be moderately wet, not slopped. He is now in a condition to pass a comfortable night. This is for summer work,—of winter care and blanketing we treat in another place.

6th. *Salt.*—A very common practice is to keep a piece of rock-salt in his trough. This I do not like, for the reason that the life of a gentleman's horse is a very monotonous one ; he will lick more than is good for him, for lack of something else to do, and necessarily create an unnatural thirst, causing him to fill himself with water, and if called on for a sharp ride or drive, is unfit for either, or if forced to a good pace may sustain great injury from his distended stomach.

A small quantity of salt two or three times a week is a very good thing : ground alum-salt, a tablespoonful each time. It is always wrong to let a horse fill himself with water before being driven.

So much for the management of the horse in the stable.

CHAPTER III.

ON DRIVING, FOR A NOVICE AND AMATEUR.

FOR one of the former, if my readers will permit, I will go with him the first time and give minute as well as general instructions. The horse is ready before your door; groom holding him,—not by bit or rein, but with three fingers in the side piece, just above the bit, so that no pressure from his hand is on the bit. This is applicable to harness as well as saddle, and I may say particularly so for the latter, inasmuch as—if with bit and bridoon or plain curb, his hand is sure to be on the curb; a dangerous position if the horse starts—a heavy hand may cause a rear, and thereby unnerve the coming horseman and injure the horse. I will just say to my young friend, Do not imagine you can drive because your neighbor can, or that it is to be done properly without care, judgment, and practice. Now we are seated, you having the reins,—place them thus: one between thumb and forefinger, the other between the third and the forefinger, hand half turned up; hold them just tight enough to feel his mouth lightly, and speak to him to start, at the same time raise your hand a little. Your horse, if an experienced one,—and you should drive no other to begin,—knows that you are unaccustomed to drive as well as you do; try to undeceive him in that. Don't be afraid of looking green by taking a rein in each hand occasionally; as soon as he feels you changing your reins, with a light touch, and then putting them back in one hand again, taking the whip in the other, and letting him know you have it by a gentle reminder, he will begin to mind his

business. Keep your hands down, as a rule,—start him at a walk, in a short time a slow jog; now feel his mouth more sensibly. You want to turn out to the right or left, and of course you pull that rein as much as is necessary, not releasing control of the opposite one,—a slight bearing on that keeps him balanced in hand and prevents too quick a turn; or a vehicle comes up suddenly, causing a turn out on the opposite side from that you are bearing, that prepares him for a quick turn the other way; and now, if necessary to do it, more quickly to avoid a collision, a sharp little cut on the opposite side, and you are clear for the present; immediately then straighten the bit in his mouth and jog on, with a light, regular bearing all over the bit—neither one side or the other; by preserving the delicacy of his mouth you secure to yourself greater safety, therefore handle it as delicately as you would a lady's hand. When familiar with the use of reins and your horse's mouth, you can hold them as you please,—whip in one, reins in the other,—or a rein in each hand, with whip at same time in one hand with the rein. Again, you must learn to give yourself ample room for turning round in, by measuring the space with your eye; that only requires a little care and experience. We are now off the stones and will have a quiet drive; no trotting fast yet, even if we have a trotter and are challenged: time enough for that when you have a few months' experience. We jog quietly for four or five miles, now a little faster, and if a shady spot walk a little, then jog on again until we stop to water. First let the hostler wash out mouth and nostrils, and tell him not to let him swallow until you are ready to start. When ready, let him have a few mouthfuls, and drive home, feeling a little more security and letting your horse increase his gait a little. Same rules as driving out generally. Now safe at the stable, horse to be attended to as before mentioned.

2d. *Amateur*.—The amateur driver probably knows as much as the writer, and what I shall write will be more for the horse's benefit than his. First, the start out should be always with the same quietness, and I hold it necessary that the whip should be always in hand going through the streets, even in the best drivers; not as a punisher exactly, unless necessary, but generally as an admonisher, to cause him to do what you want decidedly and quickly, as it is oftentimes very necessary in a turn out. The rein of course tells him in what direction you want him to go, but does not let him know how quickly you want it done,—the whip does that; if there is no haste required you want no whip,—the tap must be regulated by the temper of your horse. Now you are off the stones and jogging along quietly behind a trotter,—the speed you drive at must be regulated by the distance you want to go: if five or seven miles out and the same in, you can now and then let him go a quarter at half speed, then slack up and jog awhile, or even walk,—off again at a fair rate; but I would not allow him to extend himself more than once in your drive out, and that for not more than a quarter of a mile. Take him to your baiting-place cool, fresh, and full of go; but if the day is warm and he is heated despite your endeavors to prevent it, after washing out mouth, nostrils, and over eyes, then have him washed with cool water all under and around the root of his tail: it has a wonderfully cooling and refreshing effect. A few mouthfuls of water before starting, and you are ready for the road; raise his mouth a little by shaking his bit in it, and you are off at a jog. Now a challenger comes along, you give his bit a few little turns, speaking to him at the same time, and settle him to his trot gradually, not too quickly, for fear of his getting excited and breaking before he has properly settled, and in a very few minutes he understands

his business and has squared himself for a settled trot. Now watch him closely,—with hand and eye,—to catch the least attempt at a skip; you will feel it on your hand a second before it comes; just then, without the least delay, move your bit in his mouth and give him a little extra steady pull; the chances are he will be headed off,—no skip or break,—and he will square away more steadily than before. Now you know he has been going pretty near his top rate and will not bear any more pressure; take him in hand now a little more and keep him within himself somewhat; the distance to speed him should be regulated by his condition and the state of the weather; of that the driver must be the judge, only do not risk hurting your horse by too long a brush. To go a mile at or near a three-minute gait is enough for almost any horse not in absolute training and in tip-top condition; it is the protracted strain that injures the horse's legs and wind-works, which an occasional let-up would prevent. One word more, and I have done with the amateur: walk your horse quietly now for the last mile just before getting to the stable; take him there cool if possible, and have him attended to properly before feeding; but always examine his front feet immediately on his being taken out of harness, as a stone wedged between the frog and shoe might, if allowed to remain overnight, produce a stone bruise and lame him; or a nail picked up, although it may not have gone in far enough to hurt him, yet if



ILLUSTRATING HOW LARGE AND SMALL STONES BECOME IMPACTED BETWEEN THE SOLE AND THE WEB OF THE SHOE.

allowed to remain might, from his weight on it, get worked in by morning so as to ruin him: lock-jaw is often so produced. If you find after being cleaned out they are more or less feverish, stop with cow-dropping, then clean out again in the morning, and he will be ready for his drive again that day.

A perfect driver keeps up a sort of electric continuity between his hand and his horse's mouth, in consequence the latter becomes so extremely fine and sensitive to the former that a slight motion will very often stop a skip or break. Before leaving this subject entirely it occurs to me to add something on the importance of the word *Wo*.

3d. It is a very good habit to accustom your horse to stop quickly at the word given sharply,—he must of course be so taught. Have a plain snaffle bridle put on, and take him in the riding-room, walk beside him, caress, and talk to him, stop suddenly and say *Wo*,—he will stop because you do; and by repetition he begins to associate the word and the action, and to stop at the word. Now be a little more particular, step a few feet in front of him and, with uplifted finger, looking him straight in the eye, give the word *Wo*. Give him a few lessons daily of five or ten minutes each, and he will understand what you want. So modulate your voice as that a sharp, quick word stops him suddenly, whereas a prolonged *Woa* does it gradually. Whenever he does exactly right reward him by patting approval; he understands that as well as you.

Carry out the same whilst driving. After a few days' quiet practice with him you may relax the reins, so as not to pull at all; let him feel they are so, and stop him at the word; if he answers satisfactorily, get out and pat him and give him a tuft of grass; in a few minutes you can do it. Now, going down a hill at a good rate, sud-

denly relax your reins (still keeping them in your hand) and give the word sharp, he will back up in his breeching and come to a full stop. I am thus particular in this as it may often insure the reader's safety,—as thus: suppose a crowded thoroughfare, you driving along at a fair gait, a runaway pair behind strikes your wagon, your first impulse is to cry *Wo*. Your horse inspired with faith in your word is not frightened by the crash, stops short, and gives you time to extricate yourself from the wreck, and probably saves for you a leg or arm, or possibly your neck; the being accustomed to stop at the word he understands as his paramount duty, on a hill, anywhere; consequently the crash does not so frighten him, as the word *Wo* arrests the fright, and he does his duty,—stops.

CHAPTER IV.

MANAGEMENT OF A RUNAWAY HORSE.

1ST. A runaway horse is, after all, of not much account, unless he be a kicker in addition. In the last case he will kick himself clear of the vehicle, and if you escape without an injury you are fortunate. If you have control of your horse's head, which by this time, from having encouraged a sensitive mouth, you should have, you must reason the thing out very quickly, if he is running away really from fright. You might as well pull against a stone wall as his head until you have prepared him for your pull; take him in hand a little, and talk to him, *Wo*, so, ho; try so, ho, *wo*, ho, sharp; at each word he will turn his ear and incline it a little more. If properly broken as above to the word he will stop; but if not, and he still has a little idea of its meaning, your words will ease his fright and give him encouragement. You may now, having taken the edge off his scare, take him fully in hand. Lean forward, wrap a rein around each hand, and at the word *Wo* lean back and put all your strength and weight into one square pull only for a second; let up both reins suddenly; that will startle him, he will be at a loss to know what next; then alternate your pulls,—now to the right, sharp; again to the left, short, a few times; when you are a little winded, then fall back, give a straight pull, and say *Wo*. In ninety-nine cases out of a hundred he will stop. Or if away out in the country, your wagon and harness strong, road good, and you feel safe of it being so for a mile or more, as soon as he gets over his fright, and you

feel by handling his mouth that you have him somewhat in hand, begin to let him know you rather like that runaway business, and put the whip on him sharp and heavily,—make him go faster than before; but keep a steady bearing on your rein, not a pull; but feel his mouth sensibly, move his bit a little, now and then, from right to left to keep his mouth alive; let him feel your whip at every jump until he begins to tire of it, then let him up, and he will not want to try it again. Of course you could not do this near a large city.

2d. *Double Team Driving*.—The same general rules apply as in single. Be particular that your reins are so adjusted as to have a fair bearing all over the horse's mouth. I observe a practice, however, that I must deprecate. I mean gentlemen driving with heavy curbs and chains and heavier hands. But before commencing to talk about driving, a word on the subject of hitching a double team. Pole-straps should first be buckled to the collar or ring at bottom of collar, for the reason that if the traces are fastened and no breast-straps buckled there is nothing to hold back by. And if anything starts the horses, the carriage is at once on them, and, if at all nervous or full of fun, up go their heels and the carriage is knocked to pieces in the twinkling of an eye, and horses ruined. Pole-straps only being attached, this cannot occur. All being rightly adjusted, and the gentleman driving, his family inside, he on the box with coachman,—heavy curb bit and chains on his horses (which is the fashion),—it just strikes me what would our ancient friend Archimedes have thought to see the application of his favorite motto? He wanted strong ground for his fulcrum, and a strong lever on which to work the same, to move the world; here you have the lever in the bit, the fulcrum in the chain, strong enough to stand the pressure of a ton or more: and this applied to

the tender part of the horse's upper jaw and chin,—what must follow, but agony the most intense? The gentleman is driving along at a four-minute gait (very fast to stop on suddenly), he is in the park or some fashionable driving ground, meeting many friends and acquaintances, and in order to be exceedingly polite to salute some passing equipage, with a heavy hand reins up suddenly from a fast trot to a slow one or walk; consequence, a severe strain upon his driving tackle, fortunate if nothing breaks. He has tried to the best of his (want of) knowledge to kill or maim his family, self, and all in the carriage, and it is only a wonder to me that an accident is not of daily occurrence. Fancy the weight of two horses, say two thousand pounds, thrown back suddenly against pole, yoke, hook at end of pole, and breast-strap (for there is no breeching on this stylish harness), and, to say nothing of the momentum, you can form some idea of the immense strain suddenly brought to bear on all these things. The horses cannot help themselves; they must throw themselves back, rear, or do something to relieve themselves from such agony: therefore I must beg gentlemen to understand the pain they inflict, and drive with light hands on curb bits, or if from long habit or any other cause they prefer to rein up so suddenly, let them doff the curb and chain and put on plain snaffles; they can then indulge their fondness for sudden pulling up without any danger to themselves or occupants, and inflict no pain on their horses. If anything breaks in the sudden reining-up process, there is no escape: carriage comes on horses, they become frightened, and the consequences are likely to be serious. And now, all other things being properly adjusted, your horses should be reined up just where they travel most comfortably to themselves, without regard to show.

CHAPTER V.

EXPERIENCE WITH HORSES INJURED BY ABUSE AND NEGLECT.

1ST. Not to weary the reader with something of prolixity, before touching on horseback riding (in which Baucher will occupy a conspicuous part) or the many trifling diseases incidental to a gentleman's horse, I will narrate one or two circumstances that came under my notice, to show the effects of abuse and neglect. First, a mare—high-bred, beautiful, and fast—bought by a friend for a very high price in old times had a habit of untying her halter, consequently she was neglected and abused by the grooms to such an extent that she was pronounced worthless and sent to me. I bought her at about one-tenth of her original cost. The groom on landing her at my place said, "By my sowl, you'll never kape her tied, sir; she's the divil let loose entirely." "Very well," I said, "put her in the stable." I put a few hard knots on her strap, my man put a few more, I allowed the stable-door to remain open purposely, and went in to dinner; that over, the mare was quietly grazing in the lawn. When driven into the stable she was like a culprit, shaking like an aspen leaf, expecting of course a good sound beating; instead of which I spoke to her kindly, cut off her halter-strap three and a half feet from the chin-piece, and sent that to the nearest saddler and had buckle and billet put on, that buckled into the ring of feed-box. There being no knot to untie, all the trouble that caused such an amount of swearing, beating, and neglect, was done away

with. I know not any animal of so retentive a memory as the horse. If he gets to know his power of untying halters, and, what is much worse, breaking them, running away, kicking, biting, or any other vice, he is not to be trusted; and in most cases his vice or vices are made for him by harsh, cruel treatment. If not fed, he will break a halter to get at food, and when once done he will probably do it ever after. But to return to my mare: on examination I found her slightly sweenied, feet contracted, and sore all over. I judged that her groom had wreaked his vengeance on her by feeding an overdose at one time and starving her at another. She undoubtedly at some time had also been foundered, and was generally used up.

I had shoes taken off and quarters weakened, and she was turned out in a large field of twenty acres or more. Next day, wanting to re-examine her, I found she looked upon me and mankind generally as her mortal enemy; would not let me come near her. To fix that and alter her mind I mounted a little gray cob, with my pockets filled with oats and salt, and a rope with a noose at the end to throw over her neck, and started in pursuit; and a right merry ride she gave me; although lame, she hobbled along at a tremendous gait, having no weight to carry. The one under me was a fast galloper, and he had enough to do to catch her. After awhile I got near enough to throw the rope over her neck, and by dint of pulling and coaxing,—for I had the whip hand now, as she had me to pull out of the saddle, and as I kept my horse just near enough to keep her strained a little,—when she at last suffered my horse to come near enough, I fed and salted alternately until she was a little shaky in her former feeling that all mankind were against her, and we parted better friends. The next day it was not so difficult to approach her on horseback; but the third day she stood for

me on foot to receive her allowance. Then I was able to examine her fully and act in accordance with my judgment; so I bled her freely in the plate vein, rubbed her shoulders, put on tips, and the next day saddled her for a trial. She made no resistance to my mounting, but squirmed a little (like an eel); and in about a mile, coming to a long hill-up, she shook her head and refused point-blank to go up. True, her friend the little gray cob had just left her to go in another direction, and she wanted to follow him; I did not. Well, she would not go; but buck-jumped, reared, kicked, and did all sorts of foolish things to assert her independence. Taking it very coolly, I thought of Mr. Baucher and his alternate rein and spur; so I quietly put her tail where her head ought to be, like the brewer's horse, then raised her head with the right snaffle-rein, and applied the left spur vigorously, and alternated to the left rein and right spur. Up went her hind legs, one after the other; she was astounded at the cross application, and her unwilling motion which was accelerated by the continued alternations, and she literally went backwards up that hill, diagonally across and across again, entirely against her will, but under the effect produced by the method. When up, she was literally astonished at the fact, and was bathed in perspiration; it rained from her. I dismounted, loosed my girths, scraped, patted her, and tightened up the girths for another heat; but the fight was over. I owned, rode, and drove her for several years, and she was always the kindest animal I ever after met. Kind to affection,—if my voice was heard by her, she would come galloping up, and would never leave me until I left her. Now, all this is to show the state a horse can be brought to by abuse, and how he can be reclaimed by kind and scientific treatment.

2d. Another instance to show how a trifle in itself may

ruin a horse, that might, if looked after and the part seemingly affected carefully examined, save him an immensity of pain, and his owner a good horse. A magnificent bay of great style, fine carriage, and fast, came to me in the most abject condition of poverty. He could not even eat grass; when down, could not get up without assistance; he had no apparent defect, and yet was little better than a dead horse. Something beyond the common order of things was the matter; but what? Several days passed, things getting worse, when the idea of making a thorough examination of his mouth occurred to me: his non-ability to eat must have arisen from some cause connected with the mouth. After much search a pin was found imbedded to the head in the gum: irritation and pain resulted; he simply could not use his nippers in consequence of the pain, and was dying of starvation. The pin removed, a little lancing of the gums, and in a short time he was enjoying his food. He improved rapidly, and was in good condition for several years whilst I owned him.

If this is not a strong exemplification of the necessity of examining for trifles, I know not one.

3d. Another instance occurs to me to show the necessity of examining a horse's mouth. Sometimes his grinders become worn on the inner edge, and rough and sharp on the outer, soring the inside of his cheek at every attempt to feed. Consequently to masticate his food properly is almost an impossibility, as it is attended with pain at every attempt. A very fine mare, and tremendously fast, owned by a friend, was going back in her condition so fast that he became alarmed; he never thought, however, to examine her mouth until she was nearly starved. Coming to me, with my past experience the first thing was to look closely into her mouth, and there

the trouble was at once discovered: cheeks sore and irritated, terribly sore to the touch; and in a very short time I had the outer edge filed off smooth and rounding inwards, so that it did not touch the cheek. Consequently there could be no more trouble from that source, and she became as useful as ever (this is a common occurrence with horses getting up in years, that have been grain-fed a long time). One of the principal objects of this book is to induce gentlemen to make minute examinations for themselves of the parts affected, and thereby save for themselves many a fine horse, and at the same time give him great relief from pain.

CHAPTER VI.

SADDLE-HORSE.

1ST. It seems now in place to take up the saddle-horse, and write something on the subject of breaking him for that purpose. The dealer from whom you buy him will probably tell you he is a well-broken horse for saddle or harness; and he no doubt thinks so, and as far as *he knows* he is so; but unfortunately he knows nothing about it. To a horseman the animal scarcely knows the rudiments of his education. True, you can pull him right or left, but you cannot back him. You cannot make him do anything—walk, trot, or gallop—at your will,—in short, he is a big lump of clay to be moulded at the potter's will. I know nothing that will make a finished and thorough horseman so effectually as to let himself, in so far as I can explain them, take these hints from Baucher's method and apply them himself. It is true a good rider can get along with any horse, but not with the same ease as with a handled horse.

2d. *To Make the Horse Follow, and be Gentle at Time of Mounting.*—The trainer approaches with whip under his arm, and speaks caressingly to him; then takes the reins of the curb in his left hand, five inches from the check-piece, firmly in case of resistance from the animal; then, with the whip in right hand, tap him on the breast, this will naturally cause him to recede from the whip; as he does so, follow with a regular strain on the reins, still tapping; he will soon find no relief from that mode of operation, and will of his own accord try something else,

and that will be an advance; that second drop the reins, stop the tapping, and pat him heartily. Now repeat the same carefully over and over again for twenty minutes, morning and afternoon. In a very few days he will understand that the raising of the whip to tap him on the breast means, Follow, and you will get no punishment, but plenty of caressing. If you have a stubborn, vicious brute, there is nothing for it but to put on the cavisson (simply a band of iron around the nose-piece; or, in other words, a nose-band of iron, supported by the arrangements of a common halter); a few jerks on that will bring almost any horse to quietness.

To teach your horse to stand quietly while mounting (if he is disposed to start), shorten your right rein just as far as is necessary,—with some it is necessary to have their head turned half round to the right before they will stand: that the reader must regulate in accordance with the disposition of the horse to stand or start; when he stands from this procedure, mount and pat him, at the same time relieving the right rein; do this repeatedly until he stands without any shortening of the rein, which a few days' repeating will do.

3d. That supposed to be done, passing through your stable you observe a small fight going on between your horse and groom. He wants to back him out of his stall, and is pulling and tugging at his head, and the horse resisting with his whole force. Your head is turned away for one moment, and just then the groom, to show he *can do it*, absolutely turns him in the stall to get him out. If he is not strained across the loins by such an unnatural twist, it is more by good fortune than management. *You charge him never to do that again*; but order your horse to the riding-room, where it is supposed you are quietly educating him. First, you want only a plain snaffle bridle,

of course no blinds; you want him to see what you do. It is almost as necessary that the horse should be taught to go back easily as any other requirement; to force him back by main force on his jaw often results in a rear sprain of the shoulder, curb, strain of the loins, and many of the vices which originate in the self-protection of the animal against painful treatment. Now, to impart to him the idea of how he is to go back without all this force, and that he is to do it by the simple pointing of your finger, is what we desire to get at.

He is now bridled and awaiting you; you take the rein a few inches—say six—from the bit, holding them lightly but still with sufficient firmness to prevent an advance movement. Now with a slight bearing of the rein on the side opposite to that to which he is to be turned, bear his head and neck; then apply the end of a stick or whip to the flank on the same side, so as to make him cross the hind leg of the same side over and in front of the other; one or two steps or more (should he kick, urge the action with more force of rein and whip), and you will obtain the desired motion; as soon as the action is made use neither whip or stick, but be content with that much, and pat him caressingly and in earnest. Having done this on one side, go to the other, and by converse application of the whip and rein repeat the action on that; in a very short time—say ten minutes—he will have learned to move his hind legs to the right or left, with very little, if any, change of place of the fore legs, if you but hold him with sufficient firmness. This accomplished, by *gentle means*, you will have command over the hind legs to the extent of raising one or the other at a time. A simple illustration: if a fly bites him under the flank, what will he naturally do? simply kick in his leg towards the fly. That's the whole thing: you want to raise his legs; being able to

do that, you control them. Thus under control, begin to teach him to back by raising the hind leg as directed; and when the leg is off the ground, without bearing the rein to either side, raise the head and neck by the rein diagonally opposite to the raised leg, and the horse to support himself will make a step backward,—he *must do it* or fall. Then immediately bring him forward as before mentioned; pat him, to again assure him of your approval; he knows he has done exactly what you want, and the next time it is less difficult. Now repeat the operation on the other side, using the other rein in the same way. With very little skill, and in a very short time, say ten minutes, the object will be attained; point your stick, back goes that leg, one or possibly two steps. Now pat him again, and repeat the first operation on the other side, and you will find he now begins to understand what you want, and in an almost incredibly short space of time the mere pointing of the finger at his flank raises one leg and produces the backward step; again, to the other side the same, and he will go back a few steps without the least trouble. Now stop him, and don't allow him to go too fast; to a certain stage he will balance himself, but if hurried will resist the pressure. It has seemed to me often that the animal is as much pleased as his trainer, finding he has succeeded in doing as you desired; therefore, when he goes back at all too fast, stop him, and advance him a little. Now pat him and point the finger at his flank; back he goes on the instant, and what brute force could not do in a week, science has done in ten minutes. But the Cockney horseman may say, "Poh, who wants the command of a horse's hind legs?" As a horseman, I say that I do; give me that control and I can stop a rear, a whirl, or a runaway.

4th. *To Stop a Rear.*—The horse to rear must have the

use of both hind legs; he can neither get up nor stand up on one leg, the thing is simply impossible. He makes the attempt; you apply one spur far back, near where you have broken him to raise his leg from; up goes that leg, and the use of the diagonal rein stops the whole rear in the bud. He is off his balance, and must give it up or fall on his side; he feels that and cowers at once; or if through perverseness he makes the second attempt, use the other spur and opposite rein, and the effect is the same; with only this difference: the loss of balance is on the other side. The thing is to apply the spur at the right time exactly; although the balance is on the other side, the effect is the same,—he cannot get up, and will probably never again attempt it; for, as before said, his memory is always retentive: foil him in any attempt to do wrong, and he will always remember it.

5th. *To Stop a Whirl or Siding*.—Apply spur or whip on the same side to which the horse whirls, gently or sharply as the nature of the case may require, and raise his head on the diagonal rein, and he cannot effect his whirl any more than he could rear; he is simply confounded and at his rider's mercy.

6th. *Runaway*.—Nor can a horse run away that is broken to such obedience, and over whose hind legs you have such control, he being thoroughly taught to raise his hind legs on the application of the spur to that particular part, and by the diagonal application of the rein, repeated if necessary; the thing is to him an impossibility. Now being supposed to have his hind legs under proper control, we will take up the part which should have been first—viz.: his forepart; but the awkwardness of backing a horse out of the stall, or rather not doing so, but turning him around in the stall to get him out of it, suggested the foregoing remarks, and I jotted them down as they occurred to me.

CHAPTER VII

CONTROL OF HEAD AND NECK.

To get this, take your horse in the riding-room, with double-bitted bridle, bit, and bridoon. See that they are properly placed in his mouth: snaffle fitting easily, not too tightly, against his lip, so as not to draw or wrinkle it; curb not so low down in his mouth as to touch the tush, but entirely above it, from one-half to three-quarters of an inch; chain (curb chain) not too tight,—a finger inserted easily shows that. Look your horse kindly in the eyes, place yourself opposite his neck in a firm, well-braced position, take your curb rein about eight inches from bit, draw slowly but firmly; if, instead of yielding, he draws back from the bit, bring him up to it by a few taps of whip on his breast between the legs, as before instructed. Now again apply the firm strain on the curb; it may be some few minutes before he will begin to understand what you want, so continue the pressure. Finding that going back does not afford him relief, as he is only brought up to undergo the same pressure more severely, and that resisting brings more discomfort,—for the greater his resistance the stronger must be your steady strain, with a little more strength thrown in,—he finds it is getting too rough for him, and as a last resort tries another dodge,—yields his jaw with a little jerk; head comes in and neck is bowed. He really feels as if he had done something commendable, and is proud of it, as his arched neck and handsome crest attest. Now persevere, and continue the lesson five to ten minutes, enough for the first lesson; he must not be disgusted by

too much of this, to him, new kind of work ; twice a day will not hurt him, with an interval of some hours between the lessons, say five or six at least. In a few days you will find that instead of pushing his head out, as an unbroken horse would, he yields most gracefully to the pressure of the curb, and, in so doing, looks like another horse. You can now mount him, and with steady seat, hands down, steady pressure on the snaffle, get the same yield. Always mark your approval by a few pats and giving the rein ; the moment he yields, that moment you give ; thus much obtained, dismount. He is now ready to receive a more advanced lesson in flexion of his jaw and yielding to the bit. Standing on the near (left) side of him, you take the right curb rein in the right hand, six inches from bit, snaffle reins in left hand. So oppose your hands: the right on the curb, bearing back ; left, on snaffle, bearing forward the opposite way, until the mouth is opened however slightly ; then cease the pressure, to be resumed again when same result is desired. Let the yield be ever so slight at first, immediately let your pressure end, and caress the horse ; again try it, and you will find little, if any, resistance. *The great point is to yield to him the moment he does the same to you, whether it be to the hand, leg, or heel.* To obtain a flexion to the right, take right curb in hand six inches from bit, and left rein in other hand close up to bit ; now draw in your right hand and push out your left until his head goes around sufficiently, then pat him ; and by converse application of the same method you will obtain the left flexion. He will now very soon begin to let you know that he has a pretty good idea of what you want by champing his bit when you draw the rein, and give ; this is an evidence that he is happy in his new acquirement and appreciates his advancing education. You may now consider him pretty well in hand, for this champing does not come

until he is pretty well advanced ; you now are supposed to have perfect control of both his fore and hind parts, and can place him where you please.

If you now desire to carry him through the direct flexions of the jaw and depression of the neck, and the lateral flexions of the neck and direct flexions of the head and neck, or Ramener and croup flexions, all as per Baucher, they can all be obtained ; but unless you make up your mind to devote a year or more to your horse's education, it will be as well to be satisfied with what you have already gained, as they fit him to a certain extent as well for harness as for saddle. Not that he is taught anything on the harness subject, but he has yielded to you as his master ; given you control of his neck and jaw, instead of poking it out resistantly, and his whole physical force is subject to your control.

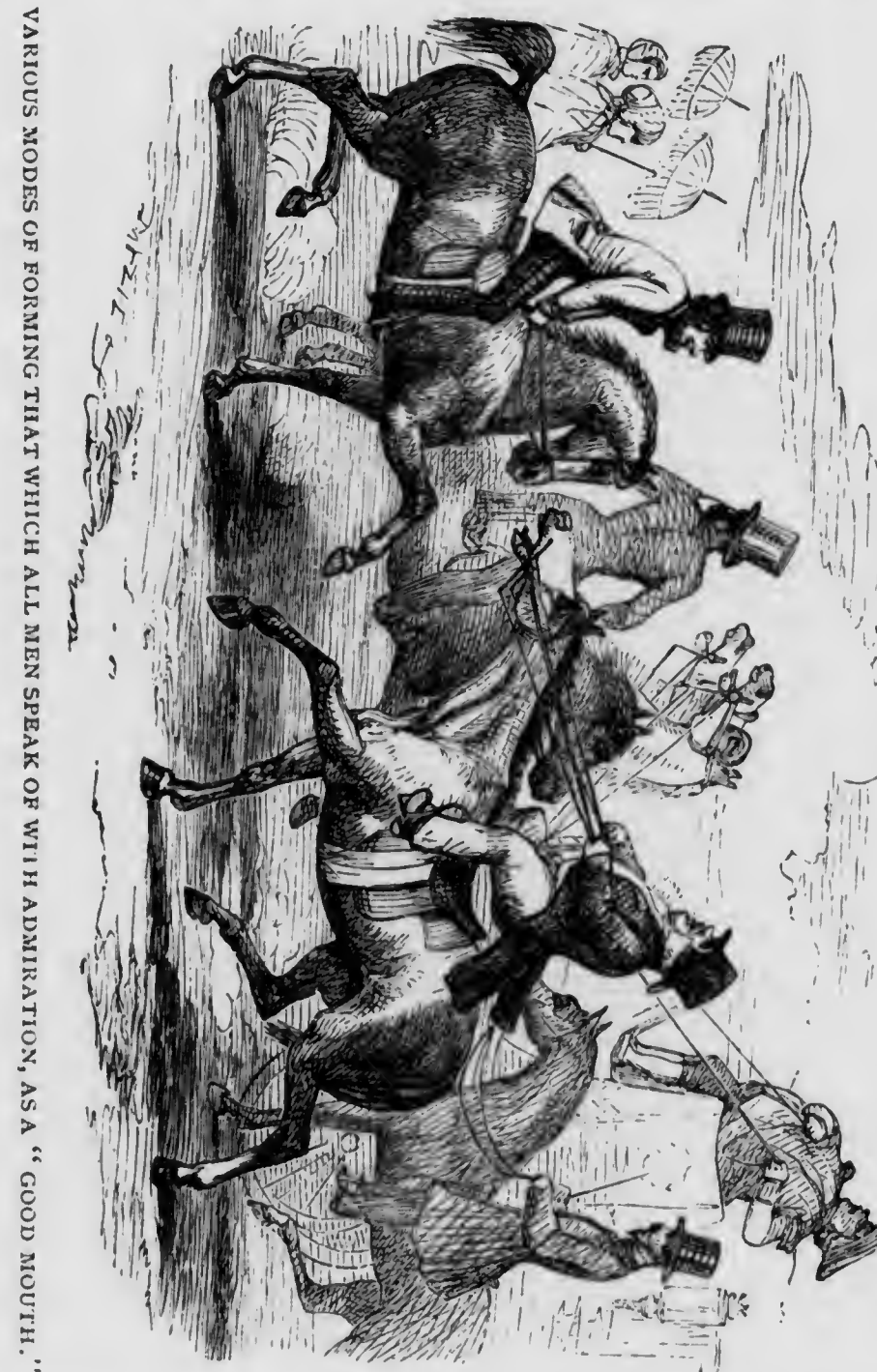
CHAPTER VIII.

TO MOUNT, RIDE, AND GAIT A HORSE.

1st. Standing on the horse's left, facing the saddle, with left hand holding snaffle rein, curb reins loose on his neck, right snaffle rein a little the shortest, to prevent his turning from you, a tuft of his mane as a little assister, or hand laid on wither or pommel of saddle, as you please; standing close to the horse, left foot in stirrup, leg pressing saddle, you spring from the right leg up, until that foot is on a line or level with the stirrup-foot; meanwhile, right hand on the centre of saddle on the right side, or a little farther back, if necessary,—on the cantel, if you choose. Without dwelling in this position, leaning forward, throw right leg over, self into seat, and right foot in stirrup, settle yourself erectly, take up first curb and then snaffle, and arrange both reins as directed elsewhere. A bad seat necessarily has a bad effect on your horse's mouth. (See illustration on page 53.)

Now, being mounted, horse's head and neck in position, keep them so by the use of rein and legs; close your legs and raise your hand, and he will advance at a sharp walk; keep him at that for ten or fifteen minutes, and if he keeps himself nicely balanced you can begin to zigzag him, still in a walk; keep that up for only a few days. Then begin the trot: slow trot, always; keeping him in proper balance between the rein and leg, and whenever he goes a little fast, and you find he is getting out, stop, or slow him to a walk, and start him afresh, slowly. A few days will perfect that, and now, if perfectly light in hand, he is ready to begin the gallop.

2d. *The Gallop.*—First bring his hind legs well under him by the application (gently) of the spur, well back, or the whip on the croup, and simultaneously raise his foreparts. Up he goes in a short gallop; before he comes



VARIOUS MODES OF FORMING THAT WHICH ALL MEN SPEAK OF WITH ADMIRATION, AS A "GOOD MOUTH."

down repeat the same, and keep at it. Before you know it he will be a nice, light, galloping horse, always provided you keep him light in hand, and his hind legs well under him (when you want them there). A horse so gathered,

as it were,—I mean his forces so under your control that you can gather them together and use all at once for your gallop or jump, or what you please,—may be called a saddle-horse and a broken horse.

Do not understand that the spurs are to be *kept* against the horse's side; the withdrawal of them at the right time is just as important as giving the hand at the proper time; in fact, it is the leading principle in the management of the horse to withdraw all punishment and annoyance as soon as he ceases to resist and executes the movement required. On the subject of spurs, I would advise the beginner to use dull ones, just sharp enough in the rowels to let the animal feel them, as a slight punishment. As he progresses in the knowledge of his horse and the effect of the spurs, he can use them as sharp as he pleases, they being under his control as well as his horse.

For further information on the subject of the spur and its use or abuse, I refer the reader to the Earl of Pembroke's treatise on horsemanship, and also to Sir Sydney Meadow's on the same; the Duke of Newcastle's book may also be consulted on the same subject, and on the use of the cavisson.

Only one difficulty now may occur, and that is not of much moment, being so easily rectified,—viz., the leading off with his right leg, making a sort of cross gallop, which is very unpleasant to the rider, who will detect it at once from the cross motion. Slow his motion (still in the gallop), and when you make the short turn at the corner of the room, or in turning any corner, raise the left rein (snaffle) and apply the right spur, so that he will sensibly feel it; the action on both must be at the same moment to produce the desired effect, and he will change in the same moment and go on leading properly with the left leg.

CHAPTER IX.

TO LEAP YOUR HORSE.

You should be a perfect rider: everything about you fitted to your horse; seat firm and elastic; legs and thighs



perfectly in unison with your horse's movements; thus, with a light hand, by feeling his mouth and a concentra-

tion of your forces (gathered), you will be able to determine the moment he is ready to raise himself for the leap; a little elastic raise in your seat, a slight inclination of the leg, enough to near the spur to his side, up and over



CLEARING THE FENCE.

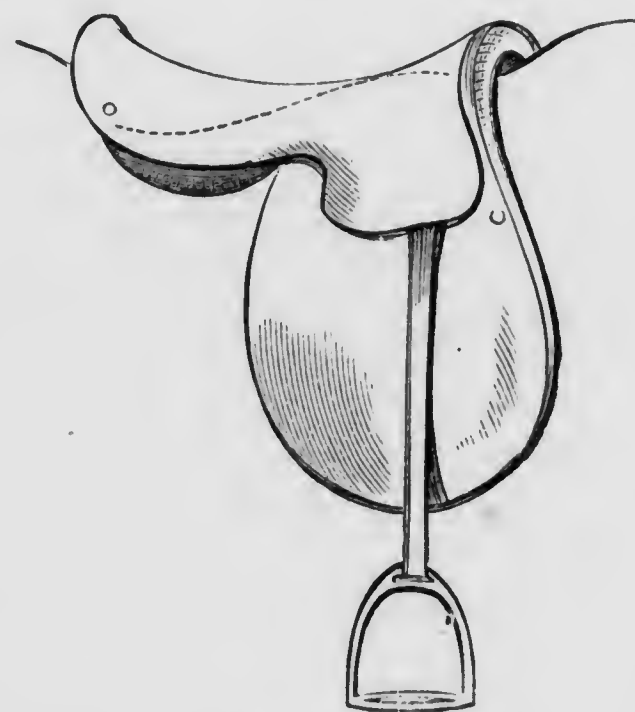
he goes; and as he comes down let your elasticity be reversed, by lightly reseating yourself in the saddle, and as you do so, open your legs and support him on the snaffle; it will break his jar, and the leap will have been accomplished, as it should be, with lightness and precision.

CHAPTER X.

HOW TO RIDE.

IN all of the above written I have been supposing my reader to be a horseman, and I think if he has gone on training with his horse, by this time he ought to be; but there are some general rules that I may as well lay down, that he may understand more fully what is required of a horseman's seat and hand. Let us begin right at the fountain-head, and take a boy old or young. I would put him on a common pad saddle (no tree), and a snaffle bridle; tell him not to turn out his toes, and to squeeze the horse with his knees, and let him go without any further instructions. Having no martingale, he will get very little support from the rein, and he will have to depend on balancing himself; this will unconsciously bring him to the proper adjustment of his forces for the balance, and if he has one little bit of horse in him, he will soon become a rider, and, in after-life, if he keeps it up, one of the very best; for this very unconscious adaptation of his forces, which comes naturally to a boy, but has to be forced in a man, gives him that elasticity so necessary, so comfortable, and so much more difficult in an adult to obtain, and to him the after-education is just as easy as possible. But for a gentleman unaccustomed to ride, we must give him additional support, in the shape, *first*, of a regular saddle. The best and most popular one is the old English hunting saddle, so modified as to become the regular road saddle by being a little shortened in the seat; the former is about eighteen inches

from pommel to cantel (or from front to back); the latter is shorter by about one to one and a half inches. It should be wide and high over the withers, and free from stuffing at that point, as the withers should not be pressed upon at all, in fact, should not be touched; and there should be two and a half inches of space all along the back or centre of pad, that air may have free course under the saddle along the horse's back, thereby adding much to his comfort and ability to stand a long ride. The padding



A SADDLE.

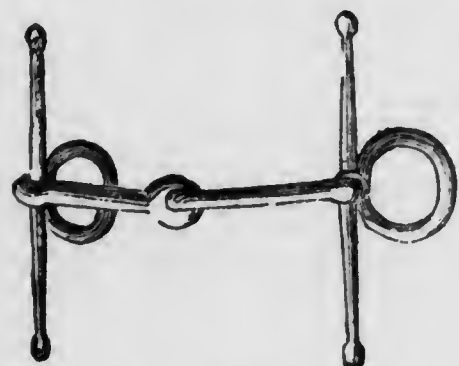
only enough stuffed to prevent his being injured by saddle-gall, and to be comfortable. I like a single piece of thin blanket just under the saddle, to absorb the perspiration. There should be two girths, with gutta-percha attachments, as they are so comfortable to the horse, giving and taking as he gallops or otherwise, and you can buckle them sufficiently tight to be perfectly safe. I do not like the plan of girthing a horse up so tight that he is uneasy all through his ride. It may make the rider feel more secure from the saddle turning; but I don't consider any

one a horseman if he cannot mount and dismount without any girth. However, as I am now giving directions for the saddle of a beginner, must not expect that much from him. Stirrups should be attached as in the regular hunting saddle, with bar closed at the rear by a clasp, which should always be kept greased. The object of the clasp is to open in case of a fall, and let the stirrup, leather, and all out, to prevent the rider being dragged. If it is not in easy working order, you will be better off without it; as knowing you have not got it, you will not depend on it for safety, and will possibly adopt some other mode in case of necessity.

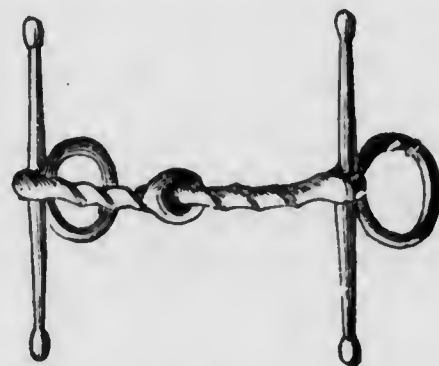
CHAPTER XI.

BRIDLES AND BRIDLING.

1st. *Snaffles*.—There should be always two bridles in the stable (if only one horse is there): a plain snaffle for the groom to ride him with on all occasions, and the regular double-bitted bridle, bit, and bridoon, for the

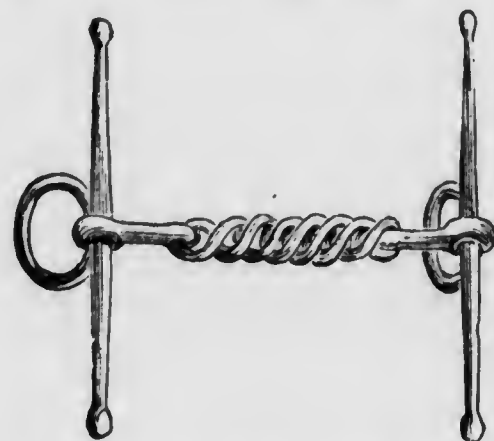


A PLAIN SNAFFLE.



A TWISTED SNAFFLE.

owner or gentleman's use, supposing him to have been educated up to its use; but if he is a novice in horseback



A CHAIN SNAFFLE.

riding, I would say use the snaffle for a short time, at least until he has submitted himself to the tuition of a good, practical horseman, one whose business it is to teach the

use and not the abuse of the curb. In the absence of such knowledge, I will merely state generally that the curb is to be used lightly, and whatever pulling is done should be done on the snaffle; your horse being broken, he will yield to either. Now, by often riding, with a light hand on your curb, and a little heavier on your snaffle, not keeping a steady pull,—for support, do that by your knees,—but now raising him a little, and again letting him have his head to stretch out his neck; and now gather your reins up, and so keep changing; you will soon have control of your reins by holding them in this wise: curb rein to be held outside of little finger, and between that and the next finger; snaffle between the next two fingers, so that when the hand is half turned up and reins thrown over forefinger the curb reins (two together) are on the top and snaffle beneath them. Now close your thumb on them and hold it there. Having your curb on the top and snaffle below, you can shorten or lengthen either or both, as you please. You can give your hand by extending it, or take it by pulling quietly back a little. I say nothing about martingales, as I prefer persons being taught to ride without their use, unless in the very first stages, and then with a snaffle bit for a few days only.

2d. *Seat*.—Should be an easy, home-like sort of seat; not stiff, but an easy kind of firmness. Head and body erect, shoulders well back, elbows in, and hands down, almost level with front of saddle; no stiffness or dead weight of any kind about, but a regular elastic seat, which is the one of all others for ease and comfort to both rider and horse. The stirrup now comes in and plays its part towards giving that elasticity I so much admire. The stirrup-strap should be so regulated that, the leg from the knee down hanging straight, the ball of the foot should rest on it with ease and comfort, so that you can

bear a little weight there from time to time, more or less,



as you desire; and just by that much you bear, that same number of pounds is taken off the weight at seat. By this

means you gain and preserve the elasticity so necessary to become a good rider; and not only that, but it gives great relief to your horse's back. A very good way to obtain this seat is to practice jockeying, which is to rise in your stirrups, back again, very lightly, into your seat, and up again and back, and so on regularly with the motion of your horse, gradually rising and falling as he moves slower or faster, and so be able to accommodate your motion to his that your weight will be so distributed between the seat and stirrup as to produce the greatest amount of that elasticity. When you once get accustomed to it, you will find the fatigue of riding comparatively gone, and that you can ride five miles with less fatigue than you could one with dead weight on the seat all the time. Your legs and thighs also will be very much relieved, and you will feel as comfortable as in an old-fashioned rocking-chair at home. I don't mean to jockey all the time, but to sit lightly, weight distributed. The knee should be inclined in, for on it you depend for the retention of your seat in case of a whirl or any other difficulty; the foot just parallel with horse's side; toe neither in nor out, so that the spur cannot touch him unless you wish to incline it.

3d. To ride a kicking horse is not at all difficult: throw your weight well back, and every time he kicks give him a tremendous welting under the belly, or, if no whip, both spurs in hard. He will soon tire of it. A rearer (the opposite) is also easy enough, but not so easy: when he goes up you rise in your stirrups and lean forward (watching that his head does not strike you in the face); if he is pretty high up, put one hand on his poll, and press, and as he comes down punish him. Unless a horse has been taught to rear for playfulness when a colt, he is easily cured; the plan before recited under the method

of Mr. Baucher fixes that,—that is, it so far fixes it as to entirely prevent the rear, if you desire to do so. I have no particular objection to a rear myself, when I can control the hind legs, knowing in that case there is not any danger; from an unbroken horse only is a rear dangerous.

4th. *Bridling*.—Gentleman patiently waiting for his horse,—getting a little out of patience; wanting to know what is the matter, and why he has to wait so long, he steps into the stable and finds his horse and groom having an interesting little fight over the process of bridling. The groom holds up the bit to the horse's mouth, and he keeps it shut tight, and no pushing of the same up against his teeth has the least effect; just as likely the animal is probably getting a few welts over the head with a broom-handle or some other equally pernicious instrument. You stop him, and say, "If you do that again you leave my service," and tell him to look at you. Then hold the bit to his teeth with your right hand, holding bridle at top of it, near top of his head, and with left hand you press the lip over on the tush, just lightly, or as hard as necessary to make him open. It will hurt him just a little, and he will open his mouth wide enough to admit twenty bits if you wanted to put them in; and so ends that fight, as all others will, with a little knowledge how to cure them.

Whilst on bits, I will merely state that Baucher's curb is a little longer than it should be for common road purposes; for him it was no doubt exactly right, with his delicate touch and appreciative experience, and using them for *ménage* training, and understanding all about the power on the horse's jaw of such a lever, which in the hands of an ordinary horseman might be dangerous to himself and hurtful to the animal. For be it understood that the horse's mouth should be kept so comfortable as not to occasion any resistance to the bit, but to obey its

slightest touch. The animal will naturally fight a disturbing bit, instead of giving obedience to it. For the curious on the subject of Baucher's bit, I refer all readers to the second American edition of his work on horsemanship. His bit was in length of side-piece six inches from top to bottom,—five is enough,—three inches from rein ring to mouth-piece, and two from that to top of ring for head-stall. The port, after all, is the most particular feature requiring attention. Examine it, and if you find any rough, sharp surface about it, that must necessarily, if not smoothed, come in contact with the horse's tongue, let that be filed as smooth and rounding as possible, so as to be perfectly comfortable to him. It should be just so high and broad as to admit his tongue without his having it so contracted as to be disagreeable. Mouth-piece from four and a half to five inches wide,—the former wide enough, unless in the case of an extraordinary large animal. Cannon, one and a half inches in circumference. I know many are made much thicker, but it is only a waste of iron and that much more weight on the horse's head. Feel carefully with a nice touch all over the bit to discover if there is any irregular surface, so that neither roof of mouth nor tongue can be injured. The doctrine advocated by at least one eminent writer, that every horse should have a bit exactly fitting his mouth, is particularly applicable in the curb. As I am only laying down general rules, cannot expect to be thus particular. Having written all I conceive necessary on the subject, it only remains for my reader to accommodate himself to his saddle, bridle, and horse, and with regular daily practice and determination on his part to be a good rider, he will make one. Now, having said all my say to him, if my lady readers will give me their attention I will devote a short time to them.

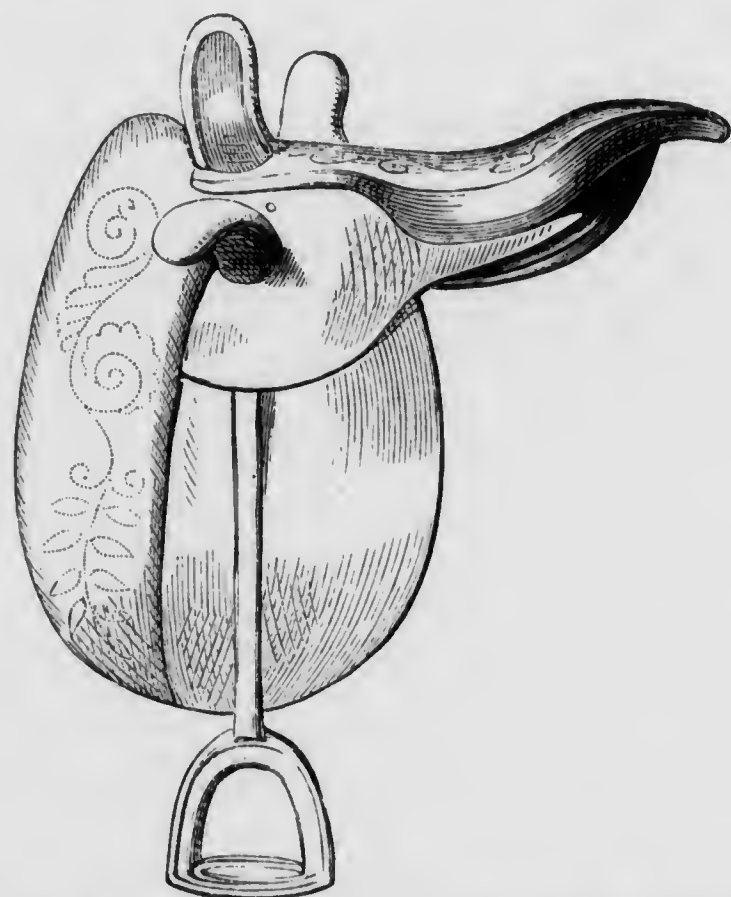
CHAPTER XII.

LADIES MOUNTING, SEAT, RIDING, AND DISMOUNTING.

FIRST of all, before mounting, or anything is done towards it, as soon as a lady makes up her mind to be an equestrienne, I want her to understand the perfect manipulation of her reins. I can fancy some people ridiculing the idea of my proposed innovation on the rights of teachers. They want to do it on horseback; I want that part understood before she is in the saddle, for the reason that it is the first step to the control of her horse, and having that, she can devote herself to her perfectly-balanced seat; without it her mind is agitated and divided between her hand and her seat, and it takes her a very long time to perfect both in that condition. Having got the latter, or her seat, she becomes a good rider in just half the time. Well, I will stand the ridicule and send for the bridle into the parlor; there hang it on anything that will bring the bit on a level with her hands, as if it were on the horse's head, she seated on a chair, the bridle so arranged. Now she is to take the reins all up together, and pick out the curb, that being the lower one. Put those as directed in the gentlemen's case,—viz., curb outside of little finger and between that and next finger; then the snaffle between the next two, turn her hand up and lay them all over the forefinger. The curb will come uppermost and the other next. Now hold them there for an understanding of the case. You know the curb when you pull hurts the horse's jaw; the snaffle only has a direct effect on the lip, and does not hurt. The former is to be

raised gently to assist your horse in starting a gallop, or to restrain him if wanting to go too fast; the latter to trot him on, or let him have his head, or to relieve him from pressure from time to time, in order to make him comfortable. When you raise him on the curb for his gallop, do not continue the raise, but extend your hand a little when he starts off; with this knowledge you look at the reins: tighten one, loosen the other, the thumb all the while keeping them where you put them. You soon weary of this, it is too monotonous; so throw them on the floor, but pick them up again and repeat the same process. Now send them away, for I do not want you to be disgusted at the trifle; but be sure to have them back the next day and day after, until you can throw them down on the floor and, with your eyes shut, pick them up and arrange them in your hand perfectly; then you have complete control of your reins, and are ready to mount your horse. I do not mean be satisfied to do it once, but a dozen times, until you feel perfectly secure that you can so alter your reins with your horse on a full run. One more word: your dress should not be long,—two feet from your feet when mounted is enough; if longer, it endangers your seat. In the gallop, your own or your friend's horse may get his foot through it, and if of strong material, it may drag you out of the saddle in a second and cause a dangerous fall. Taking it for granted you have a gentleman friend to assist you, I proceed on that ground to mount you, provided your hair is so done up that it cannot by any possibility fall down; put it up in anything you think most becoming, but *positively* so that it cannot come down by the galloping, trotting, or any other motion of your horse. That done, and all else right, the lady holds lightly the reins all together in her right hand, all in a lump, and with same hand on the pommel of saddle, standing beside

it. Whip in left hand, hanging down, she raises her left foot, gentleman places the ball of her foot in his palm, and by a simultaneous action, he raising at the same moment, and she, assisting by a slight spring, is landed on the saddle lightly. Now leg over pommel, foot in stirrup, reins changed from right to left hand, and arranged systematically in that for use. Whip changed to right hand, with dress adjusted, she is ready for lesson the first.

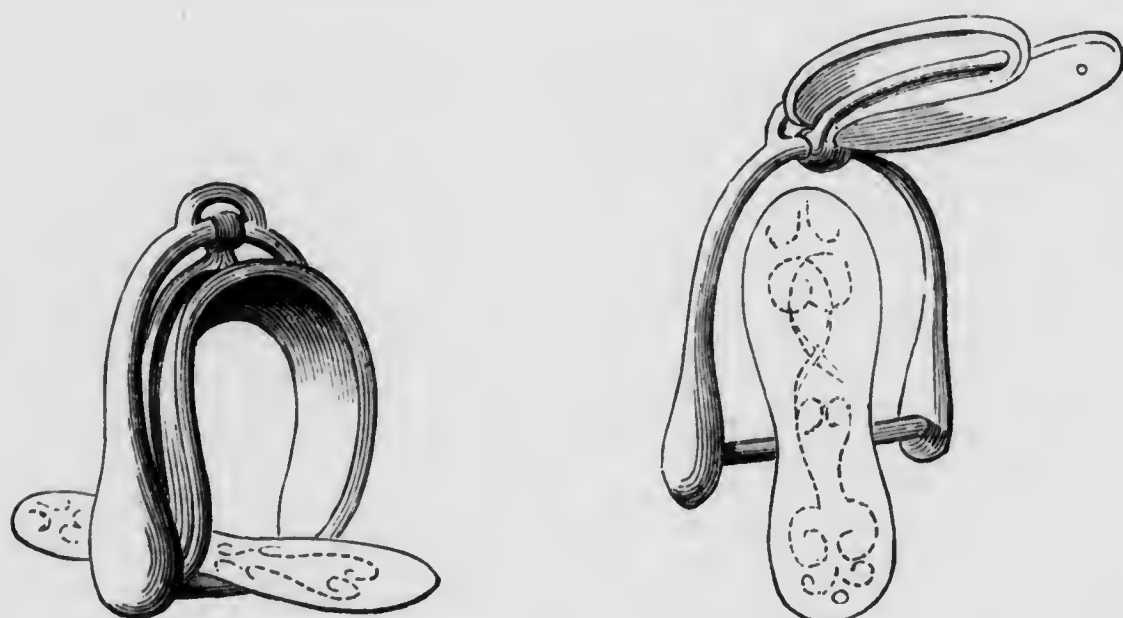


A LADY'S SADDLE, WITH THE KNEE CRUTCH AND THE VICTORIA STIRRUP.

1st. *The Stirrup*.—Let it be just long enough for a little support, so that when she begins to feel a degree of security in her seat she can learn to jockey, which will give her also the elasticity of seat that I have been working for in a gentleman. The first lesson should be in a riding-room, and not over half an hour long. The gait should be a walk for at least two or three times daily; after that a little trot and walk from time to time, as she can take

them most comfortably to herself. In a week or ten days she will be ready for a short canter, and in a week or two more she will be ready for the road, always supposing she has followed the rules for hand and seat. From their position on the saddle, very many ladies incline their weight too much on one side; this is very ungraceful, and ruinous to your horse's back. She should move in her seat until, from her own sense of gravity or some one telling her her position is fair and square, her weight is equally distributed, her shoulders well back, elbows down and in, head perfectly straight, looking directly between her horse's ears. When she has occasion to turn to speak or answer, her shoulders should not be moved, but the head, and that only turned for a moment, then back again, to look between the ears to the road in front to avoid any obstacles. Now if her stirrup is just so long that her limb and foot are comfortable, and at same time by a little pressure on it, added to a little spring on her part, she can raise herself in the saddle, say six inches, and then fall back again, she will begin to feel very much at home in her saddle; and if she rides the first month carefully to maintain this seat and perfect it, she will very soon become a first-rate rider. Having control of her reins and seat alike, her horse, if broken, will be perfectly safe for her, and she can use the curb more than a gentleman, as her touch is so much lighter. It is fair to presume now, if she is on the road, that a gentleman is with her; if so, on which side shall he ride? That is a much-mooted question, and one that I will answer in my own way (after a large experience). A good horseman should ride on her left, a doubtful or unaccustomed rider on the right. The former on the left has his right hand free to use either in adjusting her dress, if required, or arranging anything about her bridle; in short, whatever

she may require, his hand is free to do it, and, without moving her shoulders, from time to time she obliquely her face towards him to speak or answer. Altogether it is, in my opinion, more secure for the lady. The principal objection urged is that his spur will catch in her dress, or that his horse may press too closely and hurt her foot; but as I am writing now of a horseman, I cannot admit such objections, as he will not suffer either to occur, and in this position also he is between her and passing vehicles approaching. On the other hand, the novice had better be on the right, for the reason that he will have enough to do to ride and manage his own horse, and could not,



THE LADY'S PATENT STIRRUP, EXHIBITED AT REST AND IN ACTION.

if he desired ever so much, be of assistance to her. Of course his spur cannot entangle her dress; and if on the left, he would very often worry her against his will by letting his horse get so close in narrow places as to possibly bruise her limb; but even a good rider on her right, in case her horse runs away or attempts anything wrong, to use his right hand, would have to reach a long way over to get at her horse's head, bridle, or bit. The best

way to settle the question is to ask the lady on which side she prefers you to ride, as some, I know, admitting the greater security of the left, still like their companion on the right.

And now a few words on the subject of road-riding, dismounting, and we will suppose our pupil to have attained a fair proficiency as an equestrienne.

Ladies, do not ride your horses too hard; recollect they have legs and wind-works to be injured, and they afford you so much pleasure you must give a little thought to their welfare. I know how delightful a light canter or gallop is, and the longer you can keep it up the greater the pleasure, at least until you become fatigued: but your horse will come to that sooner than you, having the weight to carry; therefore think of him. Half a mile is enough at any one time for an extended gallop, then ease him up to a slow trot and to a walk for a quarter, then trot a quarter, and, if disposed, now you may gallop another half-mile. By so changing his gait he is very much relieved, and can carry you a much greater distance with less fatigue than if kept at one gait for a length of time; the change at the same time will be a relief to you. When you desire to start him in the gallop, touch him behind with your whip, raise him on the curb, speaking to him to go at same time. The same general rules for ladies in regard to the use of bridle as gentlemen. Now, if our fair reader is satisfied with her ride, we will return and dismount, being very particular to walk our horses for the last half-mile or mile, if agreeable, before reaching home.

2d. *To Dismount.*—Horse stopped; reins changed from left to right, she holding them at the end to be dropped as she alights; foot out of stirrup, and leg over or off pommel. Gentleman off his horse, and his horse four feet from the lady's, headed towards hers, for fear he

might take a notion to kick. Gentleman within one foot of lady, he puts up both hands to her elbows, she gives a slight spring off, his hands receive her weight,—enough to permit her to alight on the ground without a jar. Or, another way: gentleman standing six inches farther off, turns half around, she puts both hands on his shoulder, gives a little spring off, breaks her fall by the pressure on his shoulder, and alights necessarily lightly and with perfect ease. Now she gives her horse a few gentle pats on the neck or face to assure him of her satisfaction, which he appreciates fully. It is an incontrovertible fact that a horse often restive and uneasy under a gentleman's control will be just the reverse under a lady's; simply on account of her lightness of hand he will be submissive and tractable as possible.

A few words on the subject of her saddle: horns on pommel should be reasonably low; the old-fashioned high horns are in the way of the hand, somewhat difficult to get the leg over or off, and in beginners are sometimes wrongly used too much for support: the seat not so high as in the modern ones, by which she is perched up a foot above her horse's back. There should be a sweep of the seat, up from greatest point of depression, of at least one and a half inches at that point, and lower by that much than between the horns. The modern knee crutch is also desirable. Of girths there should be three: two inside and one outside,—the latter with side strap attached to back of seat on the off or right side,—the two former only should be buckled tightly, the latter quite loosely, as the side strap draws that back and makes it tight enough over withers. And about the padding, the same general precaution as in a gentleman's saddle; but in front it should be so raised as that the shield in front of pommel should not rest on, but only lightly touch, the neck.

Having written all I think necessary on this subject, I will take leave of my horseback riders, whether ladies or gentlemen, and proceed to discuss the various ills that horse-flesh is heir to, to the best of my ability, and endeavor to write something to alleviate their sufferings, and at the same time save many a good horse from being condemned and his owner the price of a new one; to say nothing of what affection may be entertained for him, supposing him to have been a long-tried, faithful servant.

CHAPTER XIII.

DISEASES INCIDENTAL TO HORSE-FLESH—HOW TO DISCOVER AND TREAT THEM, AND SO ON.

My reader being the owner of one or more highly-valued animals, and having his stable arrangements complete, is as yet not master of the situation, nor will he be until he can give his groom directions what to do in case anything occurs to his pets. In very serious cases he must send for the very best veterinary surgeon that he knows. But in very many cases he can order the treatment himself; as, for instance, one of his horses is lame behind (which is less often the case than before).



THE POINTS OF VIEW WHENCE TO LOOK FOR SPAVIN IN A HORSE.

1st. You look for spavin: to do so, look between your horse's fore legs, back, stooping from that point; you can better see if any excrescence once shows itself on the inner side of the hock-joint. Spavin consists in exostosis from the adjacent external surfaces of the tarsal bones, always on the inner side of the hock-joint, or in other words, an exudation from the joint or its surroundings, ossified, or in process of becoming so. Seeing the excrescence, you naturally infer that is the cause of his lameness; then examine; put your hand on it to determine where it is in

connection with the joint; if it is below clearly and seems to be tending down, from the joint, do not yet



NATURAL POSITION OF FOOT, WHEN RAISED.

BADLY SPAVINED.

BONE SPAVIN.

be alarmed nor condemn the horse, but first remove his shoes to let his heels down, and if he has heels on now, have him shod flat hereafter,—then shave the hair off the part affected, and apply a good strong blister once or twice until the part is sensibly affected by it; then when it has ceased to water and is disposed to heal, encourage it by washing with Castile soap and water and anointing with sweet oil. It is just possible that when healed the soreness may be removed, and he may never lame again from that cause, and you may save for yourself a useful animal. If, on the contrary, the excrescence is directly on the joint, grown over it so as positively to stiffen it, there is not much chance of his ever getting well; true, he may only be stiffened and lame for a mile or two, after that, being



THE MANNER IN WHICH TO FEEL FOR A SPAVIN.

warmed up, his lameness may not show again for that day; but on the morrow, on first going out, he will be



THE EXTENT TO WHICH THE LEG IS CAUGHT UP WHEN OCCULT SPAVIN EXISTS; ALSO THE VIEW OF THE FOOT PRESENTED TO THE SPECTATOR WHO IS PLACED AT THE SIDE OF THE HORSE, WHEN, DURING THIS DISEASE, THE LEG IS IN MOTION.

lame again, and so on for all time, and the probability is will be so all his life; therefore he can be considered as nothing but a lame horse; true, he might be cured in time, with attendant circumstances very painful to him; even in this view of the case, however, I have not faith enough to warrant any one's going to the expense and trouble. Sometimes a horse that shows badly spavined is enabled, not being very lame, only stiff, to do an immensity of work; for instance, that old trotter, Top Gallant, was to all appearances one of the worst spavined horses ever seen, yet it never seemed to injure him for his work, and he probably trotted some as long and game races as any horse in the world, and spavined all the time. Yet his was an extraordinary case; if my recollection serves me, his excrescences grew down from the joint; so that a spavined horse, if not lame, is good for all required purposes; but if lame, and from the appearance of his spavin, on the joint, he cannot be considered of much value.

CHAPTER XIV.

DISEASES OF THE FEET, AND OTHER PARTS.

1st. Not finding spavin, examine feet; a slight prick may have lamed him; to determine that, with a light hammer tap sharply each nail head; if he flinch decidedly from any one, conclude there is the trouble; have nail drawn, and if blood follows let all come that will: when it has ceased to flow pour in turpentine or tar—if neither can be had handily oil will do (any kind)—then fill on top with cotton or hemp, anything to keep dirt out, and let him stand two days and he will be all right; to use him immediately is to endanger his life, lock-jaw may be the consequence. Your smith now must be admonished and informed of the fact, charging him to be more careful in the future,—a good smith rarely pricks a horse; but one that has been foundered is more liable to be hurt, as the quick lies in his case closer to the outer horn. If you can see nothing and still think it in the foot, have the one you suspect unshod; it is entirely possible, as I have often experienced it, that the horse may not be pricked, but that a nail, from his having twisted it by treading on the side of a stone, may be pressed so close to the quick as to cause irritation, and soreness and lameness may follow. If even on taking off the shoe nothing is seen, have it put on very carefully, nails not in same holes; if he then does not lame, conclude it was from the above circumstance. A very fine mare came under my notice recently, lame; she was treated as above, was immediately well, and has been ever since: so I concluded that a nail pressing close enough to the quick had made her lame. If not

found from either of the above causes, examine his frog, a stone bruise may lame him; if such is found, a cooling poultice of fresh cow-droppings will relieve that in a few days, if such is not to be had use flaxseed-meal. If, however, he is not lame from any of the above causes, conclude he is strained; if there is no swelling or any external symptom by which you can determine where it is, of course you are all in the dark, and all you can do is to give him rest, take off shoes, and turn out in grass if the season and circumstances suit; if not, rest him in the stable; it is not at all improbable but that he may get well from rest alone.

2d. *Loins*.—To discover if his lameness proceeds from a strain, run your thumb and forefinger, apart, along his back across his loin, pressing a little; if he flinches press a little more; a decided soreness, there is evidence of injury. If of recent occurrence, a sheep-skin fresh from the slaughtered animal may relieve him; but be careful how you approach him with it, as some horses have a horror of blood; that and rest, with occasional rubbing, may save him, but in all cases the cure is doubtful.

3d. *Front Feet*.—If, on the contrary, your horse should be lame in front, examine his foot by the same rule as behind; if nothing there, feel his pastern-joint; no fever or swelling there, keep on examining; but if there should be fever and swelling, then stand him in water, if you can, up and over the joint; if you cannot do that, squirt water from a hose on it for fifteen minutes at a time, as often as you can for a few days; it will come all right. But if nothing is the matter, look higher up; a splint interfering with a tendon might lame him; this is a bony growth from the cannon-bone, about the size of a large pea to that of a walnut, but it so seldom lames a horse that I would examine it carefully before doing anything to it.

If, however, you conclude it is that which lames him, it must interfere with the back sinews or suspensory ligaments; true, it is not near them, but may affect, and does sometimes, by its attachments. In that case I would not blister to make a sore, but try the old-fashioned plan of a white pine stick, soft as you can get it, and have it tapped frequently through the day, and if not much lame, use him all the time,—the stick should be round, about the size of a broom-handle; in a short time it will begin to disappear, and by continuance will go away entirely; or if you prefer, try some absorbent, that may be less trouble and produce as good an effect. If not lame from that, having already examined him from the knee down,—

4th. Look higher up to the arm and shoulder; if you can see nothing, stand in front of him, raise his foot and leg, straighten it out; if he winces from that, conclude it is there. Or another plan: if the above shows nothing, push him around on his fore legs short, the one that is raised on the turn with more or less difficulty is proof of the strain, and you may conclude it is a dangerous lameness, as shoulder strains are always hard to cure, and often produce swoony or a decay of the parts around the bone, and sometimes the bone itself, causing a shrinking of the same in front the skin, but can be relieved in so far as to make a horse valuable for ordinary purposes. But unless he is very much valued, it is scarcely worth a gentleman's while to be bothered with him; though in case he should desire to attempt a cure, I will give him the receipt for so doing. The seat of trouble will be found about an indenture on the shoulder, as though the bone was shrinking from the flesh; if the skin is just at that point taken up firmly and raised so as to make a transverse cut of about one and a half inches, so that the finger can be inserted, and some pulverized camphor applied to

the part near the bone for a few days, and the horse not moved out of his stall, the probability is that he will get well; I do not mean exactly sound, but he will be well enough for ordinary purposes, and may last a long while without even showing lameness, unless put to fast work, and that would likely bring back a recurrence of the disease. I recollect one case of the very best mare that ever came under my notice; she was thorough-bred, and her racing name, I always understood, was Polly Hopkins. She was lame from the same cause every year for about three weeks, but after that was perfectly well the remainder of the year; that was so for fifteen years that I owned and rode her, during all that time she was never off her feet, and was always fit to run for a man's life. Hagerstown, Maryland, in those days was a great place for running horses, and if a young horse made extraordinary promise, so great was the old mare's fame, they would send him over to try a few jumps with her, and invariably she beat all comers. At the same time I owned a gelding by John Bascombe, and he was very fast, but never could beat her (although he had the advantage of weight). I always rode her at about one hundred and fifty pounds, and he was ridden at one hundred and twenty-five pounds; but at the first jump or two she, the old mare, managed to get nearly a length ahead, and her staying powers were so extraordinary that he never could make an inch on her. But she had this same disease every year for fifteen years, and never lamed (only at the time); she was shot, having broken her leg by a cast in the stall. It was to her I adverted when speaking of arranging a stall for preventing casts. For all this, I would not advise any one to buy a sweenied horse, for as a general rule they are not of much value, even for slow work. In short, it depends upon how the strained part is

affected. If you have the horse, and value him very highly as an old friend, try to cure him; if no particular attachment, part with him at any price.

5th. *Quarter Crack and Contraction*.—This is a separation of the laminae of the hoof, causing a crack in the front foot, the inner quarter generally, commencing at the hair and running down; and if notice is not taken of it, and the horse allowed to work until he becomes dead lame, his usefulness will be lost for six months or more. It is very easily cured if taken when first discovered: drive a very sharp three-fourth-inch chisel right into the flesh when the hoof pains it, say one-eighth of an inch in; do it quickly; it will bleed pretty freely; and when dry cover with a rag to assist in bracing the cut up, as his weight will force it together and it will soon heal. Keep him in his stall, with feet well stuffed with fresh cow-droppings every day; do not have him moved at all;



QUARTER SANDCRACK.

Generally met with, in fast horses, upon the inner side of the fore foot.



A PARTIAL QUARTER SANDCRACK DRESSED AND SHOD.



THE METHODS OF ERADICATING A SANDCRACK: EITHER THE SEMICIRCULAR OR THE ANGULAR LINES ARE EQUALLY EFFECTIVE.

carry everything to him until healed. His food in the mean time should be of the most cooling kind but plentiful, either grass or carrots or hay, but positively either grass or carrots if to be had; salt and water as much as he wants. Keep shoes on cracked foot all this time, all the others take off and stuff same as this one, at least the

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other front one. In about a month the hoof will have grown down from the hair at least one inch; now your smith should put a very delicate flat nail just at the top of the crack for support, and if you wish now he can be used moderately without injury; true, if you do not wish to use him, it would be better not to do so for two months; in about six months it will have grown entirely out and he will be as sound as ever.

6th. *Contraction of Front Feet.*—A growing inwards of the back part of the foot and reduction of action of the frog; it is a great source of lameness and very often incurable in old horses, but very easily produced, as has been truly observed. Daily exercise is almost essential to the health of the foot; you seldom see or hear of a horse that is regularly used every day becoming contracted, unless he is shamefully shod. This disease arises from a combination of circumstances: standing on plank floors, high feed, little use, and bad shoeing, or the latter alone, with some horses, will produce contraction. As many are, from the natural conformation, more prone to it, I have cured a number by simply taking off their shoes; this only occurs to the front feet, so I write only of them. Rasping the quarters down so as to weaken them, and cause a little



THRUSH IN THE FORE FOOT,
WITH A THICK CRUST, A
CONCAVE SOLE, AND A
SMALL FROG.

healthy action of the part, and at the same time increase the action of the frog, put on tips (a miniature shoe, very light, for the toe,—the lighter the better), running back but a couple of inches each side; this is merely to prevent the hoof from splitting and enable his owner to use him whilst he is being cured, but when in the stable his feet must be stuffed all the time with fresh cow-droppings. All grain should be taken from him, and his

feed the same as in quarter crack, only give him plenty of it; and if it suits to turn him to grass, do so; if not, have him used a little every day. It is better to drive him every day a few miles to keep up a healthy circulation in the foot and impart to the frog particularly some excitement, by bringing it in contact with the ground, thereby causing expansion, which will in time effect and tend to expand his quarter. If the horse is young, say from four to eight years, there is very little difficulty in effecting a cure, particularly if he can be used a year or so in the country; in an old horse a cure is more doubtful, still it can do no harm to use him with tips.

I am using an eight-year-old that came to me this spring, very lame indeed from contraction, so much so that all who thought they knew said he never could be cured; his feet seemed to be almost without circulation, so much so that any attempt at a trot or gallop caused him to hobble all over as if he would fall heels over head—this was only in front—they must have felt to him as if loaded down by some heavy weight. After having shoes off, tips on, stuffing with cow-droppings for a few weeks, say three, feeding on grass all the time, not a particle of grain, in order to cool his system and start his feet to grow, he began to feel much lighter about the parts. On trial finding him not lame, only a little tender, I commenced using him, and have been doing so for the last four months without the least ailing; true, all cases cannot be cured, but so many will yield to the treatment that it is in all cases worth a trial, especially as you can use your horse all the time if not too dead lame; if he only shows it moderately, to use him helps to accelerate the cure.

7th. *On Shoeing.*—If gentlemen would show an interest in having their horses shod, by telling the groom to be particular in the stable that their feet are always kept cool,

then go and see the smith personally, and tell him that they do not want their horses' feet tied up with heavy shoes, but to use light, plain ones, and at the same time insist upon it that he shall touch with his knife neither frog, sole, or bar, but with his buttress alone let him level off the outer crust to obtain a level bearing, then put on shoe, with care not to prick or injure the foot in any way, nature will take care of the rest, in the shedding of frog and its surroundings. Your smith will be glad to do as you tell him if he has any sense, and if he has none the sooner you get one that has the better for your horse's sake; he will gladly do it, inasmuch as he gets



A TIP.

the same pay for half the amount of iron, thereby making so much more profit. A very good plan is to have your horses' feet stuffed, with the most cooling thing you can get, the first night after being newly shod; if nothing better to be had, use wet clay. Grooms often grease the outer horn, as they think, to soften it. This is another vile practice, arising from ignorance alone; through that horn

insensible perspiration exudes; to grease it is to stop the pores and prevent nature from acting; in consequence a dead hardening of the horn instead of softening it. Standing in mud, if necessary, is a good softener (thin mud), or frequent stuffing with cow-droppings is the best of all. With the necessary orders to your smith and attention in the stable, you can reasonably expect your horses' feet to be always in order. If any of my readers are curious on the subject, and desire to know more of the *modus operandi* of shoeing, let them get Fleming's work on the subject,—probably the very best ever published,

going into the subject thoroughly as it does, and exhausting it as nearly as possible.

Tips, Shoeing with.—The originator of tips should be immortalized, and if the community of horses had any say in the matter I have no doubt he would be, as I consider them probably the most useful of all protections to the feet. It is barely possible they were the first attempt at a shoe, inasmuch as they really are only somewhat of an apology for one; and in that consists their great merit, for the less you bind a horse's foot with heavy iron bands the greater chance you give nature to act, and the more she is allowed to assert her sway the more healthy will be the foot. All a shoe is required for is to prevent the hoof from being broken, and at the same time give it a chance to grow out. Now the tip just covers the toe, and around back to the quarter; behind that protection is not necessary, unless in cases of car horses, or something of that kind, that are always on the stones. But I am on the subject of gentlemen's horses. Now for those especially who take their horses to the country in May, to remain during the summer and fall: if they would have their shoes taken off, and use them with tips all the time that they remain in the country, the benefit to their feet would be such that they would have no difficulty from any unsoundness. One may say, the turnpike would injure them: not at all; where it is very rough, ease up a little, that is all. On ordinary pikes a horse with tips will do very well; the great mistake is, too much shoeing and too heavy shoes. As a question of economy also it is worth looking into for some, as the cost will not exceed one-half the regular expenditure for heavy shoes,—if you choose to be particular about that. Besides, any smith can make and put on a tip, whereas the same might not be able to put a

shoe on properly. I should be glad to see their use more general.

• 8th. *Thrush*.—A very bad case of thrush will lame a horse; the cure for that is very simple. It is a disease of the frog, caused from want of attention, fever in the frog, producing inflammation and suppuration; a very noxious matter exudes from it, and renders it very tender and sore to the touch, ending in a decay of the parts.



Have it well washed out with Castile soap and water, scrape out all the soft particles, and when dry pour in spirits of salts,—it will bite him pretty sharply, and cause him to stamp pretty well; when the smarting is over, stuff with fresh cow-droppings, and let him stand on a clay floor until next day; then clean out again, and if any more noxious matter follows, repeat the salts and cow-droppings; meanwhile take off grain and feed him with green stuff, a week at most, and possibly a few days will effect a cure: till well keep up the cooling feed.

9th. *Scratches*.—This is the result of an impure state of the blood and filthy stables, and although not an absolute unsoundness, still a horse will stiffen from its soreness, and show lame when first going out. First take off his grain feed, then wash clean, soften, and take off the scaly surface; for that purpose, when soft, a corn-cob answers a good purpose, but a rag will do, anything to rub the top off. When dry anoint with a salve made of equal parts of hog's lard and pulverized gunpowder. Keep his blood cool by feeding on grass, carrot, or, in their absence, ship-stuff mashes, with a teaspoonful of pulverized saltpetre at night. In a week he will be fit for work again, and to prevent a recurrence just keep the parts

clean and blood cool, taking more than usual care not to overtax or overwork.

10th. *Grease*.—Is an exaggerated case of scratches coming from the same general causes, and runs up the leg (hind leg) from the heel to the back. The leg is swollen tremendously, and so stiff and sore that great lameness follows. The discharge becomes very offensive, and



THE SUREST MANNER OF PRODUCING CURB.

fungous excrescences cover the whole skin. To cure, first wash clean, then dry, next put on any powerful poultice, brown soap and brown sugar mixed, or anything stronger if you can get it. Repeat this for several days until the fungoid parts are ready to fall off; then wash again, use Castile soap plentifully, and if parts are drawn enough anoint with carbonate of lead or white lead in oil. Keep that on a few days, all this time feeding with nothing but green food, saltpetre, and mashes; as much depends on his feeding as on the dressing. It can be cured in a short time by proper care. The only bad case that ever came under my notice was cured by the above treatment, and I knew the horse to be well and work for years after, nor was

there any swelling of the leg left; in fact it was a perfect cure, and I believe that what was done in this case can be done always.

11th. *Curb*.—This consists in an enlargement, or a gradual bulging out, at the back of the hock, a few



A CURB.



A CLEAN HOCK.



A CURBY HOCK, SLIGHTLY BULGING OUT BEHIND.

inches below its point, and is probably caused by a strain of the ligaments of the tendon. To look for a curb, observe the leg sideways. Rest and cooling lotions applied will effect an amelioration of the case; but a real cure is



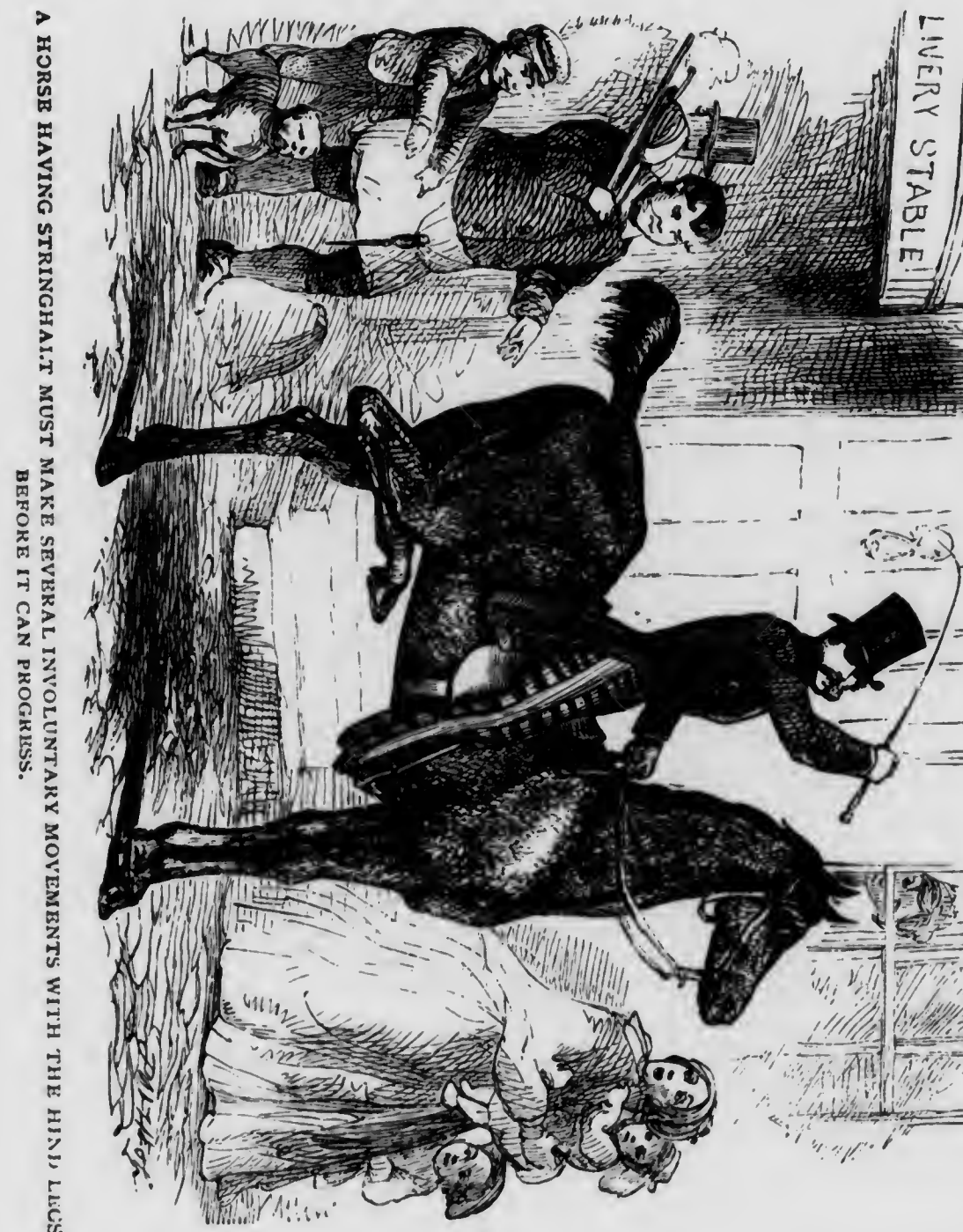
AN INDIA-RUBBER BANDAGE, FOR KEEPING WET CLOTHS UPON A CURB.



THE LINES MADE, FOR SOME IMAGINARY BENEFIT, WITH A HEATED IRON, UPON THE HOCK OF A HORSE HAVING CURB.

hard to insure. A cloth, doubled over and over, may be bandaged by means of India-rubber, as is shown in one of the accompanying engravings: when this may be used, it is afterwards to be kept constantly cool and wet. Prevent exposure whilst under such treatment, as much as possible, and have but very little movement until the heat and swelling are diminished and the leg is almost sound.

Curb is considered an unsoundness, but in buying a horse I would not mind a small curb. True, I would call the attention of the seller to it, and ask an abatement of price in consequence; but for ordinary work I would not



do anything for it, if it did not lame him, which it seldom does, only in the case of a race horse: therefore I would risk a curb if I got something off the price to warrant the risk.

12th. *Thorough-Pin*.—Is a large windgall on the hock, between the cord and the bone. It is not in popular estimation an unsoundness, but is regarded as only an eyesore, and seldom has any bad effect, such as laming or causing any stiffness; therefore I would not attempt to remove it, as it very often disappears when a horse gets regular work and attendance.



THOROUGH-PIN.

13th. *Stringhalt*.—A sudden jerking up of one or both hind legs. It is supposed to be some obscure disease of the sciatic nerve. I know no cure for it; and although a horse will work on for years with it, still, it is decided unsoundness, and shows more in winter than summer.

CHAPTER XV.

THUMPS.

AN internal working, heaving, or thumping of the flank, occasioned by excessive fatigue, probably causing some derangement of the heart-functions, but is seldom attended with immediate serious results. A horse with reasonable care may last with them a long time, and only show the distress when overworked. No absolute cure for it. His work should be so regulated as not to create too much oppression, and when attacked feed to be given as in heaves.

CHAPTER XVI.

CORNS.

I OMITTED speaking of corns when treating of diseases of the foot. A corn is generally the result of bad shoeing, sometimes arising from a bruise. It is simply a rupture of the delicate blood-vessels of the sensible sole,



DIAGRAM

Showing the position of the hindmost part of the coffin-bone when in a passive state; also portraying the shoe in the fleshy or flat foot.



DIAGRAM

Illustrating the relative positions of the wings of the coffin-bone, and the thick, concave, horny sole of the contracted foot when not in motion.

and is of a semi-fungoid character. The commonplace of cutting them out only affords temporary relief. I do not



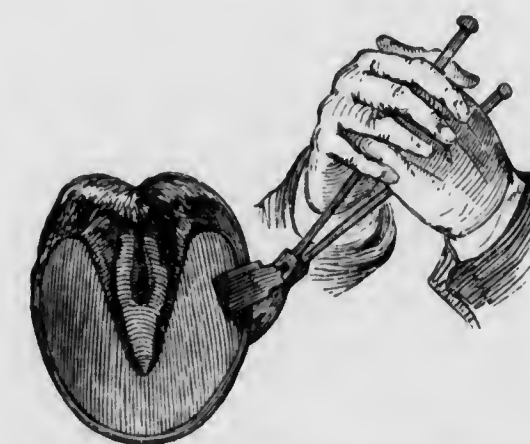
THE SITUATION AND ASPECT OF AN OLD CORN UPON A LARGE, FLAT FOOT.



THE DEEPLY-SEATED AND SMALL SCARLET SPOT WHICH DECLARES THE PRESENCE OF A NEW CORN.

like the plan. The horse should be let up for at least a month, his shoes taken off, and turned out to grass, with-

out touching the foot. The cooling food, expanded frog, and its effect on the sole will absorb the semi-fungoid substance, and the horse will get perfectly sound. Or if to turn him out is not convenient, then, with shoes off, keep him standing on wet clay, and feed him with carrots and



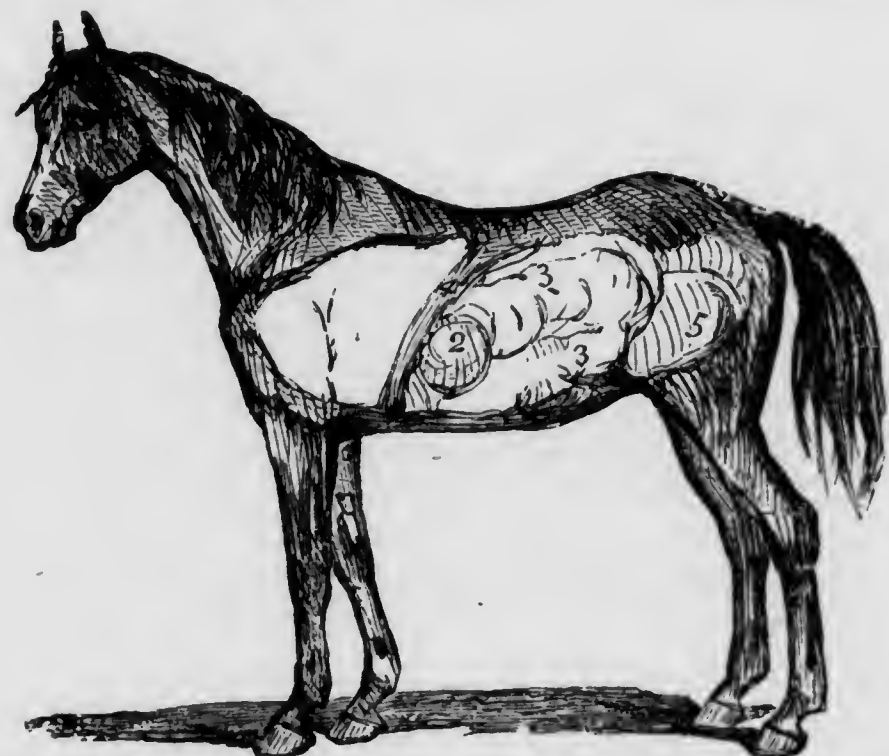
THE SOLE OF THE HORSE'S FOOT BEING TESTED FOR CORNS.

hay. The effect will be the same, but it may take a little longer time, as his general health will not be so good as if turned out. The very exercise that he would take in the field would tend to hasten the cure.

CHAPTER XVII.

WIND-WORKS.—HEAVES.

MANY fine horses are rendered unfit for a gentleman's driving by this disease, and yet very many, if properly fed, could be driven on for years agreeably. Under this head I would again urge the exactness of stable management,



DIAGRAM, TO ILLUSTRATE THE RELATIVE POSITIONS OF THE STOMACH AND OF THE DIAPHRAGM.
1. The lungs. 2. The stomach. 3. The intestines. 4. The diaphragm. 5. The bladder.

as very many of these same diseases are brought about by neglect of it, heaves among the number. They of course affect the horse's general usefulness, and are very often brought on by an excessive quantity of hay before driving, particularly if it be, as often it is, a little musty. When the horse's lungs happen to be in a state to be thus affected, the disease shows itself, and seems to be the result of excess-

ive dilatation or rupture of the air-cells of the lungs, which seems to account for the cause and symptoms attending heaves; the latter, when excessive, after filling the matured and enlarged cells, first employ the former by natural respiration, and then by a greater action of the diaphragm and intercostal muscles expel the air from the diseased portion of the lung; a distended stomach then acting against this difficulty of respiration, heaves follows. When really very bad, there is no cure; but it is not often so bad but that the following treatment will benefit him somewhat, and in ordinary cases a horse will so benefit from it as to be useful for a long time: as soon as the owner notices the symptoms as above, he inquires about his hay, and if he finds it musty and is satisfied from all the attendant symptoms that his horse is heavy, let him try at least to nip the disease in the bud; if the hay is not musty, have it cut (get a cutting-box at once if you have not one, no stable should be without one). Cut your hay one-half to three-fourths of an inch long, wet that well, and put on a mixture of ship-stuff, or corn-meal, or anything of wheat except the pure bran,—I confess to not liking bran for horses, it only irritates the bowels without affording nourishment; or have oats chopped,—anything that is nutritious, but feed nothing dry,—and change your mode of feeding for a few days at least, until you find the horse more easy, by giving him only the same quantity. But instead of giving it to him in three feeds, divide it into six parts, so that at no time shall his stomach be so distended as to cause inflammation. That done, if you find his respiration regular, return to the three regular feeds, but make all wet,—not sloppy, simply wet; now feed once a day a medium-sized spoonful of pulverized alum, and occasionally an amount of ground ginger, say a large spoonful (table spoon). If you find him improving on this treat-

ment, and you can use him satisfactorily, do not part with the horse, but keep up the wet feeding, and as long as he gets no worse he may last you a long time. An instance: I bought a fine mare before the war (at the beginning of it) for ninety-five dollars, used her for troop service, had her pretty well broken; then having no more use for her, sold her for one hundred and fifty dollars; she was next sold for five hundred, held by the party a few months, pronounced unsound, and sent to auction. I bought her, a heavy mare, for one hundred and twenty-seven dollars, and, with the treatment above described, rode and drove her, and jumped her as high as anybody's horse could get up with my weight, and she never suffered, and in fact no one knew it. If, however, they get worse instead of better, the sooner you sell the horse the less trouble you will have, as a bad case may run into farcy.

CHAPTER XVIII.

FARCY.

THIS disease, although not so dangerous to humanity, is still closely allied to glanders, and very often runs into the same; the difference is that elimination is attempted in the skin instead of the mucous membrane lining of the



FARCY ON THE INSIDE OF THE HORSE'S THIGH, WHERE THE SKIN IS THIN AND THE HAIR ALMOST ABSENT.

A PORTION OF SKIN, TAKEN FROM A FARCIED HORSE, INJECTED WITH MERCURY.

nose. As no treatment can be relied on for a cure, the stable should be relieved of a horse so diseased. It is known by small buds under the thighs and belly.

CHAPTER XIX.

GLANDERS.

FOR this there is but one cure, and that is the bullet, or any other summary process that will put the horse out of the way. To ride or drive or have any association with a glandered horse, endangers the life of the individual so engaged; it is an awful disease, and seems to be a poison in the blood, which nature attempts to throw off by a discharge from the nose, very often from one nostril only. It is pure pus that comes, yellow and opaque and quite offensive; the smallest quantity of it getting into the human system is certain death; and there being no possible cure for the horse, there is but the one thing to be done.

CHAPTER XX.

RING-BONE.

THIS consists in the throwing out of a hard substance, bony matter, about the coronal joint, near where the hair joins the hoof, generally in front. When it first appears a



THE PASTERN AND PEDAL BONE OF A HORSE AFFECTED WITH SEVERE RING-BONE.

1. The joint between the pastern bones, showing the groove in which the tendon of the extensor pedis muscle reposed.
2. The joint between the lower pastern and the bone of the foot.



THE FOOT OF A LIVING HORSE WITH AGGRAVATED RING-BONE.

The animal from which the above sketch was taken, although used to propel a cart, was by no means of a cart breed. The creature rather hobbled than went lame; but all flexion was entirely lost in the pastern bones.

strong absorbent may put it back, but if the disease once obtains a strong hold the animal is of little value, and any attempt to effect a cure will be waste of time.

CHAPTER XXI.

POLL EVIL, OR FISTULA.

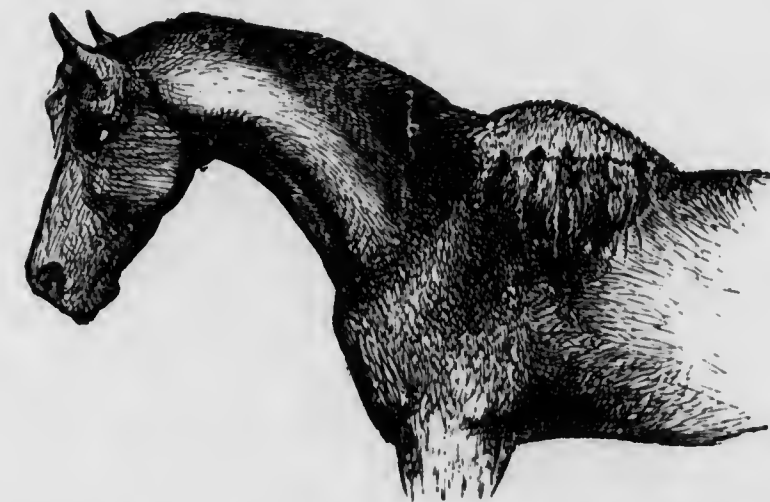
THE former comes on the poll or top of the head, a little back of the ears, the latter just beside the top of the wither. Unless the horse should be a highly valued one, I would not advise a gentleman to bother about curing him, but sell him to some one whose business it is to cure



THE POSITION OF THE HEAD BEFORE AN ENLARGEMENT ANNOUNCES THE EXISTENCE OF AN ABSCESS ON THE POLL.

and sell; but for the benefit of any who should desire to attempt the cure, I will advise. Both diseases come from the same cause, a bruise; and as they first get hard, swell, then suppurate, the only plan is to open at the lower part of the diseased poll or wither, so as to let the noxious matter out below. When it has been running until the swelling is somewhat abated, wash out with Castile soap

and water, inject the same repeatedly through the day, until it is seemingly disposed to get better; then inject with a mixture of Castile soap, camphor, turpentine, and proof spirits, in other words, soap liniment, with a few



A HORSE WITH FISTULOUS WITHERS IN THE WORST STAGE.

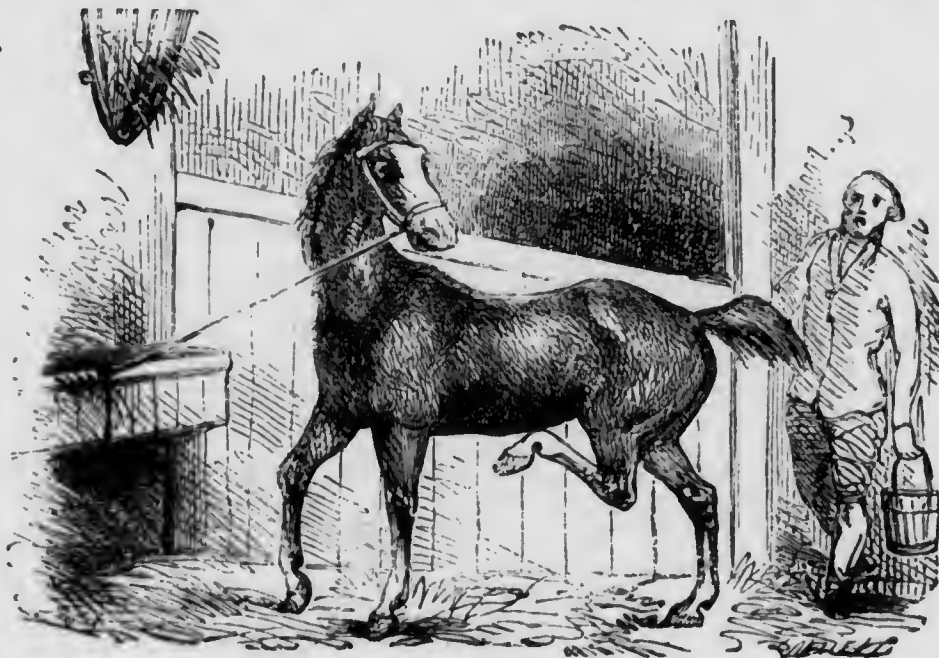
drops of turpentine added to it, any druggist knows it. Use this twice a day, and if it does not do good the case may be set down as hopeless.

CHAPTER XXII.

CHRONIC COUGH, ETC.

As it occurs very often after eating, the seat of disease is evidently in the lung, with distended stomach and a pressure on the diaphragm, and that on the lung; they forming some congestion are not able to transmit the air, and in violent efforts to discharge their functions irritation is caused and cough follows. Short-cut feeds, but little hay, anything to keep him cool, and feeding little at a time and often.

Spasmodic Colic may come on at any time, even when



THE FIRST STAGE OF SPASMODIC COLIC.

you are out riding or driving. I have on several occasions met friends on the road with their horse out of the shafts, harness off, and the animal in agony, rolling about the road; knowing me they would hail my appearance, with a hope of getting home with their horse sooner than expected. In such a case the most efficacious

mode is with your pocket-knife, small blade, sharp point (if not so, make it as sharp as you can on the first stone you see); then bleed him in the mouth freely. As he will swallow his blood, it will relieve him in a few minutes, and probably he will not have a recurrence for some time; if he has, when you get home drench him with whisky and black pepper. To explain, so that any one can bleed in the mouth: standing on the left of his head, you raise his upper lip with your left hand, and with your right, knife blade held firmly, stick it in quickly about one inch and a quarter in the gum, near third bar, counting from back of front teeth. If it spurt out well and bleed freely, it is enough; if not, go to the other side and try it a little deeper, always keeping the point of the knife inclined a little up. I never knew a horse to bleed to death, but one came very near it. It only requires a finger held over the orifice, or if that does not answer, a cobweb put into the outer edge of the cut will do it; this is supposing you are bleeding on the road to relieve a horse from sudden pain, where no modern appliances for stopping blood are to be had.

CHAPTER XXIII.

EYES.

If any inflammation, examine the eye first to see if any hay-seed, bit of straw, or hay may be there; if so, take it out and wash the eye with cold water, and the inflammation will subside. If not, and you can see nothing but general inflammation, then wash with lead-water. To do so properly use a small, clean sponge,—be sure there is no sand in it; when saturated with the lead-water, squeeze the sponge in the cup above the eye,—the water will run into it



AN EYE DISPLAYING THE RAVAGES
OF SPECIFIC OPHTHALMIA.



TERMINATION TO SPECIFIC
OPHTHALMIA.

from the corners, and cool it nicely. If the inflammation continues to exist, bleed in the vein beneath the eye: it is a small vein, but by holding your finger on it, to stop the regular course of the blood, it will swell so that with a small, sharp blade, by sticking it upwards so as not to cut through it, you will get a reasonable amount of blood; and the probability is, unless something serious is the matter, that the eye will get well. For further information on this subject I refer my reader to Mayhew's "Illus-

trated Horse Doctor," by J. B. Lippincott & Co., as it gives a detailed account of the eye and its various diseases. In the country, where the people are in a semi-barbarous state in regard to such matters, they blow in dry bird-lime through a quill, and if that does not restore, which it is impossible that it should do, as it only makes bad worse, they aggravate the case by blowing in pulverized glass, which causes the poor animal intense suffering; and if there was a shade of hope for his sight, this caps the climax, and he is a blind horse for life. I once had a curious case in a superb gray horse, owned and ridden by a physician, who was a heavy man and a heavier rider; he was absolutely ridden blind. I bought him for twenty-five dollars as an experiment. On examination found his eyes covered with a sort of blue film, the washer terribly inflamed, and by some invisible attachment drawn up, nearly half over or near the ball. I also observed in his ear a prominent cord; and, thinking over

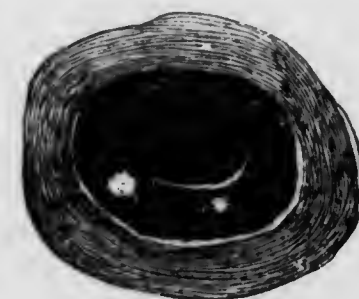
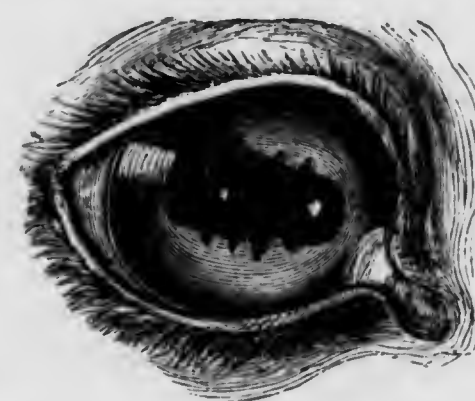


DIAGRAM ILLUSTRATING
THE ACTION OF BELLA-
DONNA.

The inner space represents the natural pupil, on which no cataract is to be observed. The second space represents the pupillary opening as it may be enlarged by the application of belladonna, whereon two partial cataracts are to be remarked. The other space merely represents the dilated pupil.



PARTIAL CATARACTS, OR SMALL WHITE
SPECK WITHIN THE PUPIL OF THE EYE.



COMPLETE CATARACT.

it, wondered if that was by some slight ligament attached to the washer, as that cord, from its hardness, was evi-

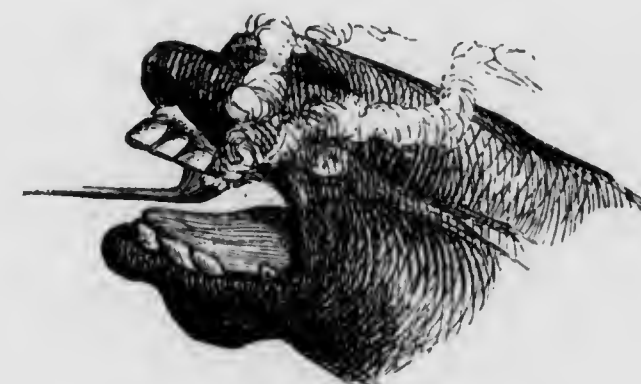
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dently contracted. *Ergo*, might it not cause his blindness, from the inflamed washer effecting and causing that film over the sight? Without much thought I cut the cord in each ear directly off, clean and clear; this was thirty years ago, but I have a most distinct recollection of it, as it seemed a hollow tube; at all events, the eyes in a few days began to look better. True, I fed him salts freely, and cooling food, and in a week's time he seemingly had as fine an eye in his head as you would desire. A party came to see him, who became so pleased with the horse that he insisted on buying him, knowing all the circumstances. I parted with him reluctantly for one hundred and fifty dollars, and often heard of him as being foremost in many a deer-hunt, but never set my eyes on him after. However, presumed if he was able to be at some good ones in a day's hunt, that his eyes stood him in good stead.

CHAPTER XXIV.

LAMPAS AND WOLF'S TEETH.

LAMPAS occurs more frequently in young horses from four to six years old. The gums swell and rise even with and sometimes beyond the teeth, are very sore, and make it impossible for the horse to eat without great pain. Consequently he refuses to eat and becomes thin and languid. To cure, use a sharp-pointed knife; stick all over the swollen parts, deep enough to bleed pretty well. If that does not give you enough blood, scarify by drawing your



BURNING FOR LAMPAS.

blade from point to point, and the inflammation will subside and the horse be all right. If a recurrence, do the same thing over, and the inflammation will subside entirely. This is a great deal better than the brutal practice, so prevalent in the country, of burning the horse's gums with a red-hot iron. It is cruel beyond expression, and should never be adopted.

Wolf's Teeth.—I invariably knock them out, often

they can be taken out with the finger; if not, knock them out. A small iron applied with a good stroke of a hammer will do it. They come just before the grinders, are easily got at, and have some mysterious connection, from their attachments, with the eye.

CHAPTER XXV.

LUNG FEVER.

A VERY common disease, particularly in the spring, although it is of rare occurrence to a horse well wintered in the city, but seems to affect young horses brought in from the country for sale: whether from cold taken on their journey or from the closeness of a city stable, the poisonous air with which they are infected, or what else, it is not nor cannot be known; probably it comes from a combination of causes. If the breathing is labored and somewhat accelerated,—although the pulse may not be very much quickened, but beats with a sort of a bulge,—the ears being dejected, coat rough, bowels costive, and a general oppression, he is in a bad way. Bleed now from the jugular, but not immoderately, one quart is enough if it seems to give relief; my object is now to give not take away strength. After a slight bleeding, soak each foot in hot water up to the knee, not scalding, but near it, for ten minutes, then wrap in flannel cloths. Give him in this case rock-salt in his trough, or any kind of salt, and with plenty of bedding; let him rest an hour or more, then give him a bucket of gruel made of scalded shorts or ship-stuff, or middlings; after scalding, let them be cooled. Put two quarts of this mash into a bucket of hot water, —make it very hot, even if the weather is warm, the object being to start perspiration,—give him this six times a day if he will drink it; let him have his legs kept in the woolens until morning, and then examine. If still cold, repeat the soaking process of yesterday

and wrap up again; take care to keep so that no draught can touch him, but at the same time as much pure air for him to breathe as possible, and the chances are your horse will get well. Some cases are beyond all chance of getting over. If markedly improving, continue the gruel. Hand-rub his ears often during the day under any circumstances; as soon as they and his legs show warmth his danger is lessened. Continue the gruel, the more he will take the better his chance.

CHAPTER XXVI.

COLDS OR CATARRH, AND MEGRIMS.

AN inflammation of the mucous membrane of the nasal cavity. First reduce the solid food of your horse, substituting grass or carrots in reasonable quantity. I would only reduce his grain by one-half. Give him to drink tar-water, say one quart of tar put in the bottom of his bucket, then bucket filled with water, and let it stand overnight; when drunk, fill it up again until the tar ceases to give out any virtue, then remove the dross and put in fresh. He will soon get over it by this treatment unless he is very bad, with considerable fever attending. If alarmed, you had better send for a professional, for when it gets to that stage it may be a long case and hard to cure, and if not properly taken in hand may result disastrously.

Having now written all I deem necessary at this time on diseases, I will add a little on miscellaneous subjects. But just at this juncture my farmer, who has two, to him, very valuable work horses, tells me there is a disease prevalent in the neighborhood, and that a friend of his has lost a pair of horses that cost him three hundred dollars. I tell him, without knowing anything about the disease, to get asafoetida, and put a lump big as a walnut in a rag, and nail it in the bottom of his horse-bucket, and another lump somewhere near his feed-trough, so that he cannot get at it to eat (as some are very fond of it), but so that he will inhale the air infected by it. Then whitewash every week around his trough and inside of it, and around his hay-

box. All these are good preventives. Again, a gentleman just called to say he has a very fine horse, fast and handsome, a good feeder, apparently sound, but occasionally all of a sudden he falls in harness, gets up in a minute or so all right, and keeps so until he falls again,—the other day he broke a shaft. I say to him, part with him immediately, he may fall some day in double harness, break a pole, and if the other horse is not as quiet as a lamb will endanger the lives of all in the carriage. You are never safe behind him. The disease is called megrims, and may be caused by a fatty condition of the heart, or by some congestion of the brain-vessels,—we do not know exactly,—but he is not fit for a gentleman's use. For slow work on a farm he might last a long time and do no harm, if kept on grass in summer, and on hay, with half a regular allowance of grain, in the winter.

A ball of, or lump of, pure clay is a most excellent thing for all horses, acting as a tonic; and a horse of this kind should have it always before him. In fact, all horses should have access to clay by some means, as there is nothing better; put it in his trough occasionally, and you will find he will lick it with delight.

CHAPTER XXVII.

WATER.

UNDER all circumstances give your horse clean water; no animal is more particular about his water, he will almost die of thirst rather than drink from a dirty, greasy bucket; muddy water he will drink, but greasy water never. He will reject his feed for the same reason, and is probably the most dainty of all animals, being neither carnivorous nor omnivorous. His feed trough should be whitewashed inside once a month if it can be done, and always looked into or felt before feeding, to out pick anything in the shape of a nail or pebble, if any happen to be there. Never allow your horse to drink from a public horse trough without examining if any noxious matter happens to be there, from horses before him; from not attending to this, glanders may be transmitted, and other diseases.



MISCELLANEOUS.

MEDICINE.

I AM decidedly opposed to giving medicine, as my readers may have judged ere this,—unless it be a little Glauber's salt in their food. The drenching and balling done by grooms is not to be allowed on any consideration. Sometimes in ignorance they severely injure a horse's throat, to say nothing of the permanent injury the dosing may do him. It may be rank poison for all they know, it is a ball to them, that's enough,—down it is rammed.

I must confess that in the spring, weather just getting hot enough to produce languor or weakness, I like to feed a mixture, as thus: two tablespoons of hickory ashes (or oak)—wood ashes, one spoon pulverized alum, and one fine-cut tobacco,—what they call cut-and-dry,—mix all together and feed in their chop at night. It strengthens the digestive powers and destroys worms. Certainly I never knew it do any harm.

A tea made from the bark and berry of common spice-wood, well boiled, and mixed with a horse's chop, is also an excellent thing for both stomach and blood.

ACUTE FOUNDER.

This should never occur to a gentleman's horse; but for fear that it should, it may be as well to know something about its cause, treatment, and so on. First, over-

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heat,—being allowed to swallow, when the whole system is overwrought, water or even grain; a very few mouthfuls of either does the business. When done his feet will be feverish, and he will be stiff all over; will often not be able to rise. The only thing to be done, and the sooner the better, is to take from him from one to two gallons of blood from the jugular vein. Take off shoes all round, and poultice feet with fresh cow-droppings, to cover foot and pastern with it, if possible; or, if not to be had, bran or linseed-meal mixed with warm water. Put on fresh poultices five or six times a day, and for some time, until he is able to bear his weight comfortably on his feet. Feeding all the time green food, not a mouthful of grain, but as many carrots and as much hay as he wants, or, if to be had, grass. When he is sufficiently able to feed and take care of himself, let him be turned into a soft meadow for a few months. It often ruins a horse for all his after-life, and a very little care would prevent it. No matter how tired a horse may be, if you will only wash out nostrils and mouth, and under and around the root of his tail, dry rub his ears, straighten his hair, and give him either hay or grass, but the latter to be preferred,—let him eat of these what he will for half an hour, then give him water and a mash of scalded oats and ship-stuff,—and he will be all right next day. If he will eat a little hay before his water there is no danger of founder, unless he should be in a draught.

One other cure for founder, if the horse can be taken soon after the mischief is done. Get him into a profuse perspiration,—in plain English, sweat it out,—blanket him all over, hood and body blankets (if on hand), make him trot, gallop, or anything, to get him well sweated; then in a close stable, where no draught can reach him, scrape well and rub. Give some tepid water mixed with a quart

of corn-meal to the bucket; then blanket up again, and get another sweat out of him. Scrape again, put on dry clothes, and let him stand. Feed him scalded ship-stuff, if grass is not to be had,—the latter always preferred,—or carrots and hay. Without any more violent exercise, the probability is, by care and attention to his diet, and keeping his feet cool, he may get over it. There is no certainty in either cure, but either may do a great deal of good if the case is not of too long standing.

WATER AND ITS USES IN CONNECTION WITH FOUNDERS.

Extremely cold water, or very hot water, are alike useful in cases of slight founder, or slight indisposition of any kind, causing stiffness, want of appetite, and general debility, attended by slight fever. If he will drink very cold water (ice cold) all right; if not, and generally horses prefer hot to cold, then give him hot,—not warm, but hot, as hot as he will drink it,—and as much as he will drink; it will cause free perspiration, and effect a quick and certain cure, always provided he is not allowed to take cold; keep him free from draughts, and if the weather is cold put on a blanket until he is quite well.

HORSES THAT HAVE BEEN FOR YEARS GRAIN FED.

To such, taking off shoes and turning out to pasture, if but for two weeks every year, gives them a new lease of life, and almost insures them against lameness from crippled feet. It is a great thing to give a horse grass in summer; nothing cools him so nicely, or is so grateful to his appetite. If gentlemen would take the trouble to let their horses pick grass, or pluck it and give them on a hot afternoon, the avidity with which they eat, and the seeming enjoyment to them, would repay the owner for the

trouble, and then the horse returns to his stable with a renewed stomach for his night's feed.

RINGWORM AND VERMIN.

The former very much resembles the same in a human being, coming in ugly blotches on the horse under his mane, and thighs, belly, and behind the fore legs. When discovered the horse should be kept by himself, and anoint the affected parts with a mercurial ointment (red precipitate), to destroy the parasitic fungus, once a day for a few days; feed meanwhile on cooling food; have him well rubbed with hay or straw; neither curry-comb or brush need be used at this time, particularly if he is in a stable with other horses, and yet apart from them, as he should be. A week of care will cure, but he must not be allowed to go out nor have any chance of getting cold; to subject him to that would be to ruin him.

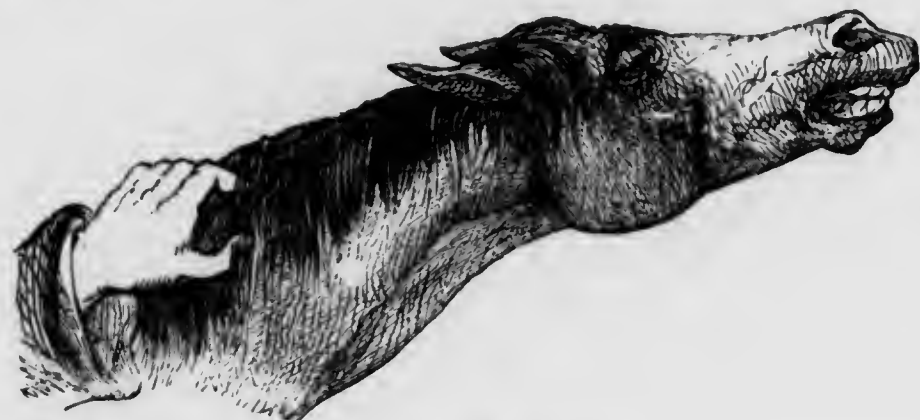
VERMIN (LICE).

A horse wintered in the country (poorly), nothing but hay, and that possibly of bad quality, is very apt to come up in the spring with a hide covering multitudes of lice. If his coat stares, and his eyes look dull, and he scratches himself in the stall, look for them; and when found, as they will be, use the same ointment as in the case of ringworm, only rub it around the base of the ears, down along the root of mane, under the fore arm, along the spine, root of tail, and under thighs inside; a few anointings will kill them all. Keep them out of the weather also, until the effect of the mercury has been dissipated.

MANGE.

This is a skin disease, the hair seeming to rot and fall off, and is decidedly contagious. To be sure of it,

scratch him along the mane, and he will stretch out his neck to get the full enjoyment of your titillation. For cure



THE TEST FOR MANGE.

use an ointment, say four ounces of strong mercurial ointment to one pound of soft soap; anoint freely.

A CRIBBER



A HORSE IN THE ACT OF CRIB-BITING.

cannot be called exactly unsound, and yet such a horse may so fill himself with wind as to unfit him for the work of a sound horse; it is a habit one animal will take from another, and I have no doubt its origin may be traced to a diseased stomach. This is a case in which rock-salt in his stall always may do some good, by keeping his stomach cool; he will not want to crib; but the habit once acquired is hard to break; a strap around the neck, buckled tight, will do it for the time.

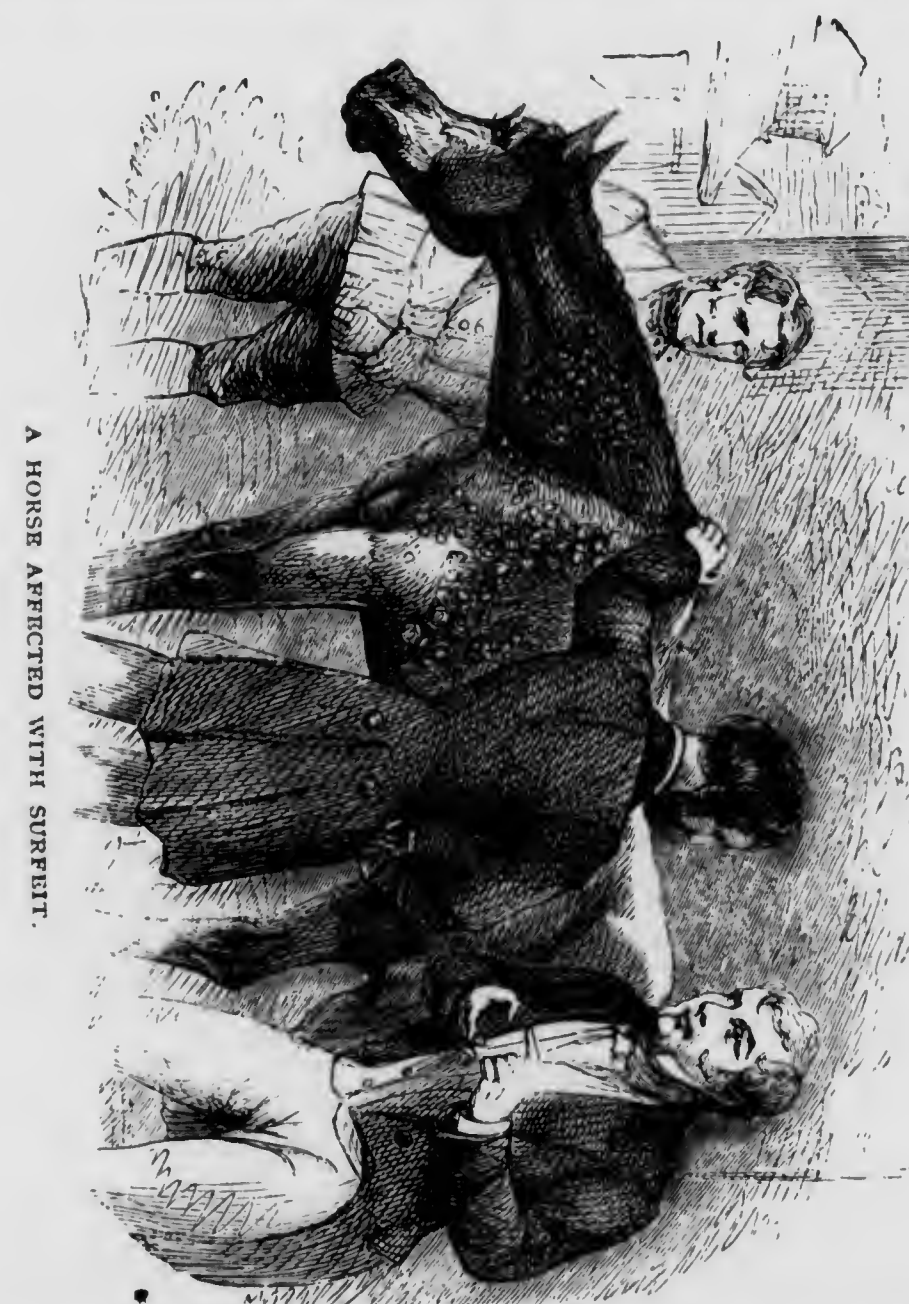
EGG BLISTER.

In a case where you only want a moderate blister, as it will only ruff the hair if not too severely applied, take the white of three eggs, one wineglass of turpentine, and one

of proof whisky, put in any vessel, stir well, and heat in the sun or in a stove for a few hours, until it becomes a thick paste, then rub the affected part twice or thrice a day, as seems best. A fine horse came to me lately,—hind sinews strained badly. I did nothing but rub with this egg blister, and he was cured entirely. True, I altered his shoes, to take the strain off the heel and put it on the toe.

SURFEIT,

from the combined causes of over-feeding and over-heat-



A HORSE AFFECTED WITH SURFEIT.

ing, sometimes give much trouble,—the animal feels very

badly, his digestive powers are weakened, he breaks out in skin blotches, and is unfit for work. Bleed from the neck liberally, feed him nothing but green food, as much as he will eat; if that is not to be had, wheaten mashes and saltpetre, as before directed; stand him on clay, or stuff his feet with it and let him rest; keep his skin clean that the pores may be open and nature act. A few days of this treatment will make him all right again.

HIDE-BOUND.

This is not by any means unsoundness, it is brought about by neglect, irregular and bad feeding, combined with want of rubbing, from which his pores are measurably inactive. Have him well cared for; feed chop every night for a time (corn-meal and shorts), water regularly, and give him to amuse himself plenty of good pure clay and salt; in a short time his hide will be healthfully loose.

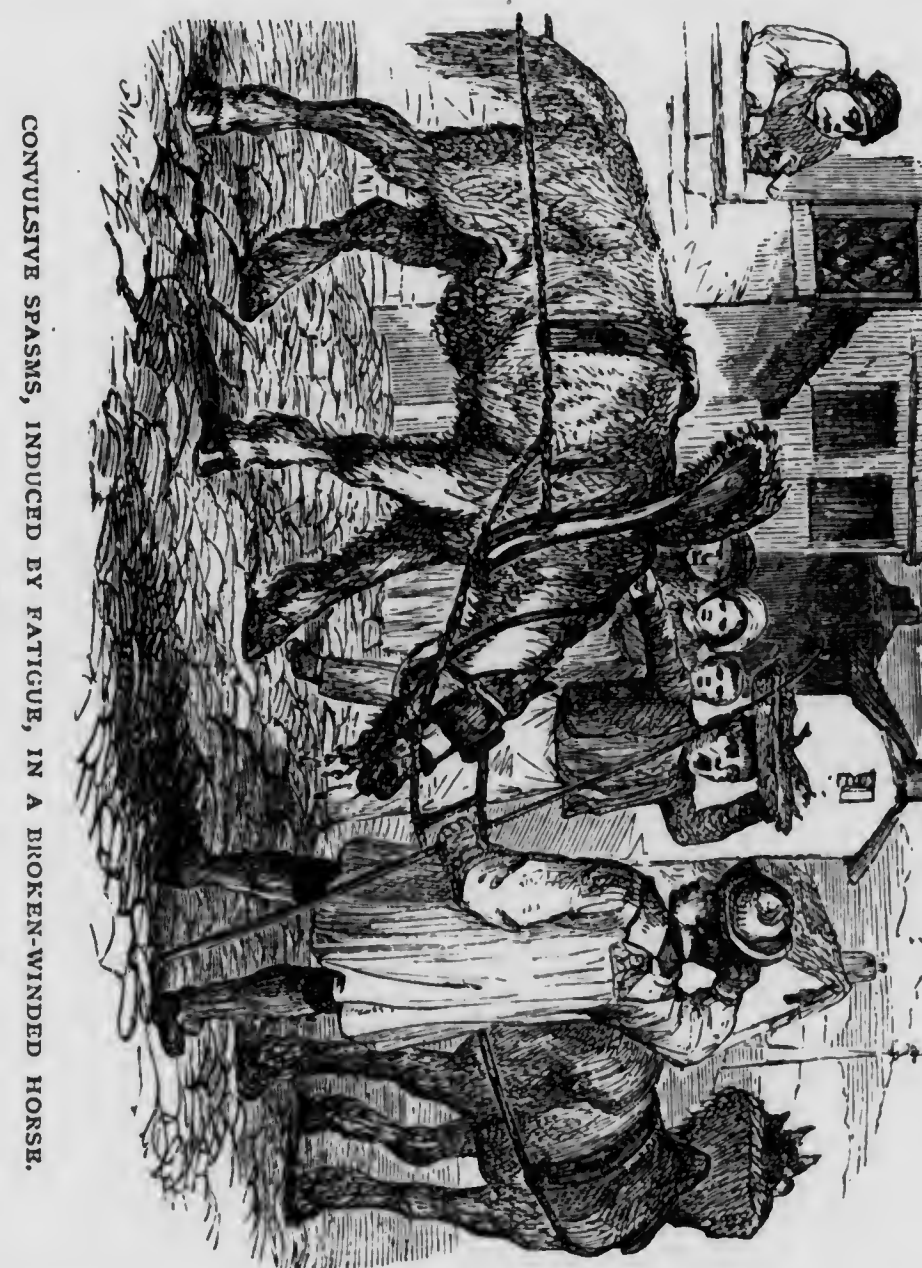
ROARING, OR A ROARER.

An unnatural sound, seemingly from the throat (when in action). It may be produced by some unseen compression of the larynx, or by some particular conformation of the throat from some injury received,—possibly from having a ball administered injudiciously; thus, with his head braced up very high, the noise is necessitated. It is undoubtedly unsoundness, and not likely to be cured; cooling food, and allowing his head to remain in the position nature intended it, may do some good.

BROKEN WIND.

This is a sad affliction, and seems somewhat of the same general character as asthma in the human being, and is brought about by insufficient nourishing food, where a

large amount of work is required, allowing his health to run down for want of care, great exposure, and starvation,—whether in the lungs or stomach, or both, is hard to tell;



CONVULSIVE SPASMS, INDUCED BY FATIGUE, IN A BROKEN-WINDED HORSE.

the poor creature is a burden to himself and valueless to his owner.

CROOKED OR SPRUNG KNEES.

Occasionally we meet a horse fresh from the country, young and sound save his being forward on his front legs. The dealer will probably tell you he was so from his early coltship; and from his youth at present it may be so, and he

may still be a sure-footed horse. In that case it is waste of time to attempt a remedy; but if he should become forward in your ownership, and be a reasonably young horse, say from five to ten years, as soon as you notice the decided weakness, have shoes off, and let him have a run at pasture (if possible, an entire let-up from work), and whilst idle have the back of his leg or legs (for sometimes only one is affected) rubbed twice a day with dog's fat, if to be had,—if not to be had, hog's lard, with a small quantity of pulverized camphor mixed or melted in with it, say four ounces to the pound of lard. Three months' rest will probably restore him for years of usefulness.

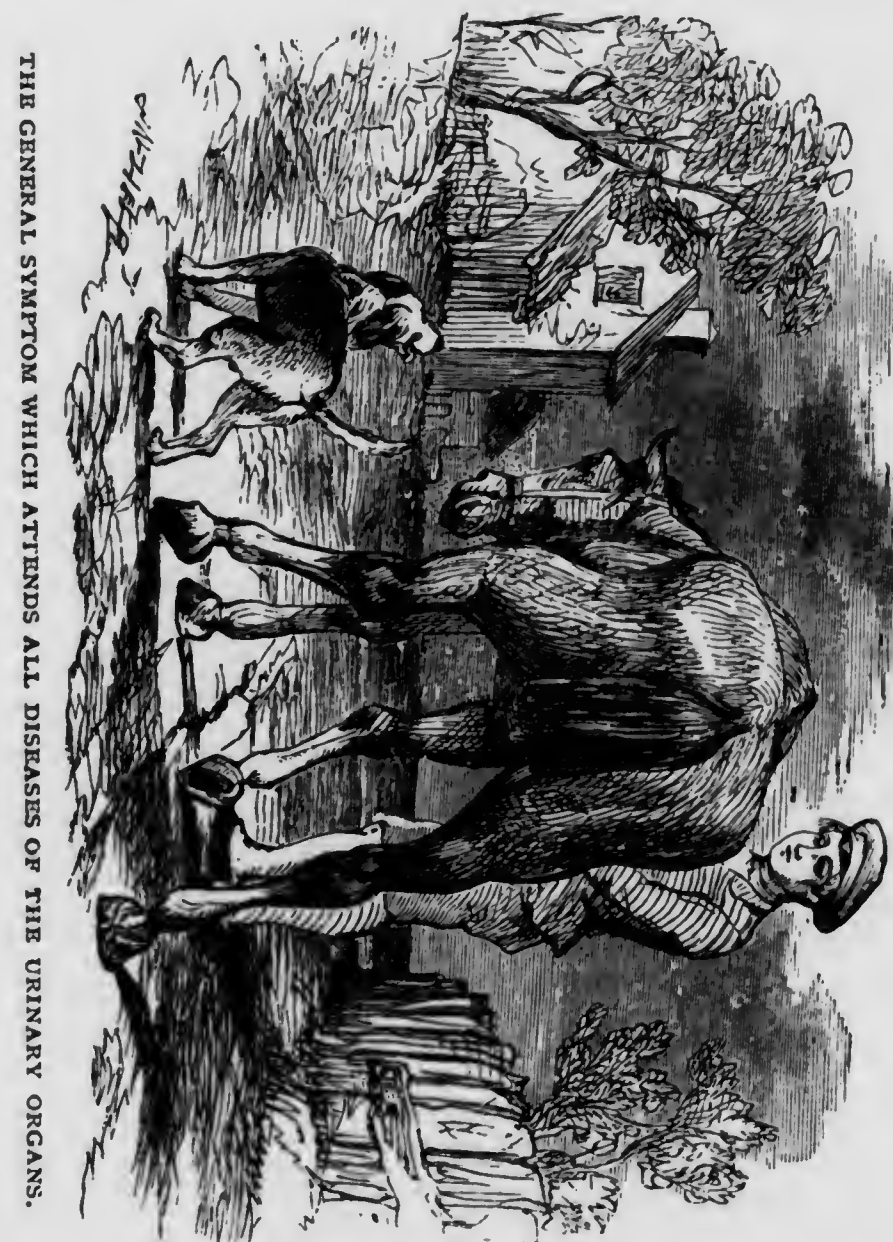
TO CURE A SHYER OR JIBBER.

Under some circumstances it is impossible to absolutely prevent a shy,—as, for instance, if it comes from defect of vision. In that case the only remedy is to cure the diseased organ. True, a horse having confidence in his rider, when about to shy, if spoken to and encouraged, may be diverted from his object; but it may be of so frequent recurrence as to become irksome to the rider; and there is no cure, unless to cure the sight. Some horses shy from habit; having once learned their power to wheel and run, they will do it for their own amusement. To cure that is very simple: when he wheels, just at the moment apply the opposite spur pretty vigorously, and draw the opposite rein (snaffle), turn him clean around, that will stop his run, and face him to the object. Now incline both spurs, and with steady hand and seat speak to him to go on: if he still refuses, and wheels again, repeat the same method; only at each repetition let him feel more punishment from the spur. A very few attempts will satisfy him that in this case he has mistaken his man, and that he is no more master. A shy from absolute fright

must be treated without punishment, but with firmness. Let him have his gallop out, a short distance from the object of his fright, then wheel him, and caressingly urge him back, but not fast, slow but decidedly; and so repeat until he will come up to and near the object. Nervous shyers to be treated the same as affrighted ones.

DISEASES OF THE URINARY ORGANS.

A horse affected with inflammation of the kidneys, or any of the surrounding parts, will show it by straddling as



he walks, to enable him to relieve some pressure on the

inflamed parts, that would otherwise, in his natural gait, be very painful to him. True, these organs in the horse are very little prone to disease; if observed, however, and you find him suffering apparently as he travels, give half an ounce of sweet nitre in his mash, for two or three nights successively; let him remain without work during that time. Feed nothing but cooling food,—no grain; warm mashes, or grass (if to be had); keep his strength up by mashes of ship-stuff; if grass cannot be had, feed carrots instead. If he gets no better, then send for a regular practitioner. A teaspoonful of pulverized rosin sometimes has a happy effect, if the obstruction is not great.

BRITTLE HOOFES.

Often an otherwise valuable horse has feet that will not hold a nail for any length of time, and has to be sent to the smith-shop once a week to have new nails put in, and shoes removed; all this is necessarily attended with great expense, and the foot at last becomes so bad that the horse is useless. The cure is as simple as it is certain. Have a tin or earthen vessel standing in the stable out of the way of your horse; let it be said to contain a gallon, more or less; every morning let it be filled with chamber lye, a stick, some three feet long with some rags fastened at the end, put in it; with this let your groom swab your horse's feet as often as he pleases, at least a dozen times a day, keeping them stopped meanwhile with cow-droppings or flaxseed-meal. Feed cooling food, and in a few weeks your horse's feet will be perfectly sound, when the practice can be discontinued.

CLIPPING.

On this subject much has been said pro and con. All I shall say is simply that a horse used for light purposes, to be speeded often on the track or road, causing great

perspiration, if he is a heavy-coated horse naturally, should be clipped in the fall: of course he must be more carefully blanketed than the unclipped horse. The reason for this is obvious; he comes in sweated, the weather cold, he cannot from the thickness of his hair be rubbed dry, and, no matter how many blankets put on, he will remain clammy all night, and, of course, cannot feel well next day; therefore such a horse, I say, have clipped; but that is the only kind I indorse the practice for. Of course this will apply to *ménage* horses, and all others that are intended for such severe work, causing immense perspiration in cold weather. In hot weather they dry off without it, and then their summer coat is by nature lighter, and it is not necessary.

BLANKETING AFTER A DRIVE.

There should be two blankets for every horse in a gentleman's stable: one for the stable, and another for a dress-blanket to take out with you. The stable one should be all wool and large, and should not be put on at once when the horse comes in wet; let him steam off for five minutes, during which time rub his head, ears, and over the loins; then double the blanket and throw it over his loins, and commence to rub from head to loins, then, being still double, put it over his shoulders and continue to rub loins and hind parts. Now pull it back single from withers to croup, first buckling in front. Now rub his legs well, and up under thighs; give his hay, and let him munch at that; buckle up surcingle, and let him alone for the night. Even if not quite dry, the perspiration will come out on the top of woolen blanket, and his skin will be warm and comfortable. Feed and water without fear of trouble, and in the morning you will find him warm and feeling better than if you fussed over him half the night.

BLANKETING GENERALLY.

A horse of all work should not be blanketed until winter has fairly set in, as the early blanketing prevents nature from putting on as warm a coat as she would otherwise do. If a horse comes in cold and chilly, a blanket thrown over him until the stable is shut up for the night is good for him; but then it is better to take it off. I am opposed to the custom prevailing of heavy blanketing, it tends to make the horse tender and liable to colds.

Horses driven by physicians, and all others much exposed in very bad, cold weather, should have a short blanket from the saddle back, and a breast-piece of blanket. In very wet weather a rubber in the place of a blanket should be used. A blanket, if soaked, and the horse standing in it, is worse than nothing on him.

Horses so used in our cities, and all other places, that are from their duties necessitated to stand (after probably a sharp little drive) exposed to all weathers, should under all circumstances, when having to stand the brunt of a storm, either of wind, rain, sleet, or snow, be turned tail to it. The vehicle behind them affords them some protection, and as it is their natural mode of standing in a storm, to them is afforded a great amount of comparative comfort over the opposite position of heading the storm, the latter subjecting the animals to colds and inflammations arising therefrom, and possibly in some causing the loss of a fine horse. The trouble so to place him is nothing; but the insurance against disease is great.

Driving in blankets, as many coachmen do, is all wrong; they should take the blankets on the box with them, and, if required to stand a long time, double and throw over the horse's loins when standing.

HINTS TO A GENTLEMAN TRAVELING WITH HIS OWN HORSES.

If you have a five hundred mile journey before you, by all means take your own groom, as you can only rely on country hostlers to feed and water. Supposing the season to be summer, time it, if you can, to have moonlight nights. First, have your horse's shoes attended to a few days before starting,—if new ones are required his feet will have become used to them before starting; if the old ones are good, have them removed only. Be ready to start at four in the morning, and feed before starting only two quarts of oats to each horse; take your own cleaning tools,—all, including bucket,—to enable you to wash mouth and water at little rivulets, as you meet them. Do not drive over five miles an hour for the first four hours, that will take you twenty miles to breakfast. That being in progress of cooking, have your horses stripped, and lead on to a greensward; after eating five minutes, they will want to roll; let them do it to their heart's content. Now put in stable, wisp off and straighten hair with cards, and give them each two pounds of hay; have legs hand-rubbed whilst eating this. Now they may be watered and fed four quarts of oats, bed well, and shut up stable; make it as dark as possible, to keep out flies. After eating, if not disturbed, they will lie down and rest until nearly noon; then feed ten quarts of oats to each and water, and make your arrangements to be off at three P.M. In the afternoon's drive, in fact in all the drives, average the time or distance in the time,—five miles an hour, but do not let it be done by steady jogging, wake your horses up now and then, and drive half a mile at a ten mile an hour gait; then go back to a three mile or walk. Change their speed every now and then for their relief,

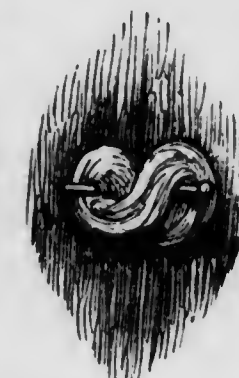
and wash out mouths at least once every hour if roads are dusty. From three o'clock until eight will put twenty-five miles behind you, that will do for the first day and second. After that they will be a little seasoned, and you can go fifty-five to sixty a day without injury. Supposing you at eight o'clock at your journey's end for that day, then do as in the morning; let them eat grass and roll if they will,—the former they will certainly if you give them the chance. After putting in the stable, and wisping off and rubbing legs, give hay again—two pounds. That eaten, water, and give six quarts of oats, or, if you can get it, some middlings or rich ship-stuff; put two quarts of that to four of oats for night's feed,—wet it a little; then, after all, give six pounds of hay, bed well, and leave them for the night, after stopping their feet with cow-droppings. Do this every night, as it will keep their feet delightfully cool, and they will feel so much better for it in the morning. Your groom should be up at three o'clock, clean and feed; only give two quarts of oats before starting at four, no hay. Then pursue the same course as the first day, and if you wish to increase the distance to fifty-five miles, drive five more in the morning and five more in the evening; divide the ten miles. By this careful mode you can drive a good pair of horses five hundred or one thousand miles without the slightest injury to themselves, and with great pleasure to the driver.

BOG, OR BLOOD SPAVIN,

was omitted in treating on bone spavin. It does not always cause lameness; in fact, seldom. When it does, if the horse is an old friend, try removing it by absorption,—it is the only reasonable way; if that will not do, nothing will.

BLEEDING.

Use fleam or lancet to bleed in the neck. The first is the old style, and the safer instrument. It is to be placed on the side and top of vein, and struck with a piece of hard wood, so as to cut down and across, not straight, for fear of injuring other side of vein. The latter (lancet) has more the appearance of a regular surgical instrument, and is therefore most used by the practitioner, when, as in fleam, it is necessary to blindfold on the side you strike. For smaller veins, use small thumb-lance or penknife.



TWISTED SUTURE.



PRESSING THE BLOOD CUP AGAINST THE NECK, TO ARREST THE DOWNWARD CURRENT, AND TO CAUSE THE BLOOD TO FLOW FORTH.

F*

A BALKY HORSE OR JIBBER.

It is difficult to get him over the habit, which must be done without the whip, or even its presence. Some will back and break your vehicle, and to whip them will prob-



A POPULAR CURE FOR THE IMAGINARY VICE OF "JIBBERING."

ably produce a kick. It is not the weight or their inability to pull from any cause; they have been spoiled, and do it for mere deviltry, knowing their power in that. The only

way to get over it is to find what they are fond of: sugar, or apples, or whatever it is; and before you get in to drive let them advance to you to get the desired object; give it, jump in quickly, and start off immediately. The object is to get the idea out of their noddle; the expected treat does it. You don't give them a chance to balk; instead of it, you *treat* your horse to something. He forgets it for the time, and possibly by frequent attentions may be cured for all time as far as you are concerned. When another owner gets him, he may go back to his old tricks unless he knows how to tickle him.

ECONOMY IN FEEDING.

The following remarks are not intended to interfere with, or at all contradict the directions given for feeding under the head of Stable Management in another chapter, as that represented the stable of a gentleman who has his horses driven probably but once a day, and then a sharp ten or twenty miles' drive, and whose horses should always be kept in tip-top condition; but this is simply for another class of gentlemen, viz., those to whom economy is a necessity. There are many such, obliged from their situation to keep a horse, with but little work for him to do; still, that little requires a horse. To such I would say, when corn is seventy-five cents a bushel, and oats from forty-five to fifty cents, feed corn, as one bushel of corn is about equal to two of oats in its nourishing properties; it is therefore cheaper by nearly one-half. True, it is a little more trouble, but very little, as it should be soaked for at least twelve hours before feeding,—that is, after it has become hardened by age and exposure to the air (after being shelled). The reason for soaking and making comparatively soft is, simply, that being very hard, a horse fed sparingly, as I propose for an economist, will be generally

very greedy, and will not take time to properly masticate the hard corn but swallow it whole (in part at least), which will do him harm instead of good; if soaked, it is comparatively soft, easily masticated, and of course more easily digested, and he gets the full benefit of its strength in nourishment. Two quarts of this, with two pounds of hay in the morning, two pounds of hay at noon only, and two quarts of corn, with six pounds of hay, at night, will keep any horse in good order and healthy for short drives and light work. If in the summer, and grass can be substituted for hay, so much the better. At seventy-five cents per bushel for corn (a bushel will yield thirty-two quarts), four quarts a day will last eight days,—that is about ten cents a day,—and ten pounds of hay at twenty dollars a ton is one cent a pound, or ten cents a day: with the corn is twenty cents a day, for a week is one dollar and forty cents; cheap enough. On this you can keep your horse, for the work as above described, in good order, provided he is otherwise properly attended to, and regularly cleaned, watered, and bedded; the latter, if in the country, need cost nothing but the gathering, as green weeds in the summer and leaves in the winter are all that are necessary. My reader will say, what a bother to weigh the hay every meal! I say it is very little trouble; a patent balance, costing twenty-five cents, weighs twenty-five pounds; tie up what you suppose two pounds of hay, weigh, and regulate that and your six pounds night feed, and in a few days you can guess within a fraction of the amount without more weighing; and you can save all the trouble of soaking the corn for at least four months in the year, from November until March, by feeding it on the cob, right out of the field. Many will say it is dangerous to feed it green, unless you feed much salt with it: that is a great mistake, salt begets thirst, and much water

to slake that thirst, on green corn, might produce colic; by itself, with the hay fed first, there is no danger. I have fed it for thirty years and never had a sick horse from it; but instead of salt, I feed a tablespoonful of ground ginger for a few days, each day with the corn, and consider it in the fall the very best food a horse can partake of; from six to eight fair-sized ears in the morning, and the same at night, are enough for all necessary purposes for a horse of little and slow work. You may even drive him some pretty nice spurts on such feed, only do not make them too long, not more than a quarter of a mile; but he will stand ten miles a day of easy work on such feed and continue to thrive. And again, another piece of economy is to have him shod with *tips* all the time, instead of shoes, as they should cost but half price.

COLT'S DISTEMPER.

This is common in colts, and only requires care and a little knowledge. If swollen about the glands, blister with egg-blister, or a mixture of three parts turpentine and one part sweet oil; rub in pretty well, and keep in a good, comfortable stable and feed wet hay, salted, and wheat mashes, warm, and give to drink tepid water. If he gets worse, swelling increasing, poultice with brown soap and brown sugar, in order to induce its breaking on the outside; that done, he will soon get well, only keep up his strength by cooling mashes, and keep him in a warm stable.

HORSE EPIZOOTIC.

In view of the epizootic now raging in Canada and Rochester, N. Y., and since in Boston and New York City, on the old principle that an ounce of prevention is worth a pound of cure, I would advise all owners and

stable-keepers to have their stables thoroughly white-washed, also feed-troughs, inside as well as outside,—of course stables well ventilated,—and to continue to white-wash inside of troughs three times a week during the prevalence of the disease. I would also have a lump of assafoetida, size of an egg, put securely in a rag, out of the reach of the horse's mouth, but so that he can inhale some of the odor from it; this done, if the disease shows itself by a disagreeable discharge from the nose and reddening of the membranes of the eyes and nose with a slight hacking cough and general depression, with excited pulse, go to work at once. Give him to drink hot water, as hot as he will drink it; mix two tablespoonfuls of nitre in half a pail of water, and let him drink as much hot water as he will; and feed slops (the rich offal of wheat), ship-stuff, and that scalded first, and then cooled a little, so that he can take it warm; mix a little salt in this, to create thirst for more warm water. If the legs are cold, steep in hot water, very hot; put each leg in a bucket of it, and sponge the whole leg for a considerable time, say fifteen minutes, and then rub dry; quickly wrap up in heavy flannels, not very tight, but still tight enough to remain on; this done, perspiration will almost to a certainty follow. If so, rub dry, blanket lightly, and keep him out of any draft, and the chances are the horse will get over it; if, on the contrary, he still has fever, make a blister of the whites of three eggs, one wine-glass of turpentine, one of proof spirits, mix well, then warm it, and it will thicken to a paste, and rub this in well behind the shoulder about the lung, once, twice, or thrice, if necessary. If these things cannot be had, use any other blisters, all the while keeping extremities warm, and feed warm food and hot drinks; his throat may be rubbed with same paste, if perceptibly swollen; at same time keep

nose and mouth well sponged with vinegar diluted with water. Meanwhile, have the floor of the stall covered (where the urine falls), and about the spot, with ground plaster of Paris,—it will take up and fix the ammonia therefrom and relieve the air of the stable very much. If that is not to be had, ground charcoal,—or braes of charcoal, is the next best absorbent. Of course this applies chiefly to a diseased stable.

ON HARNESS.

Great care should be taken that your harness is good and strong, not only the leather but the buckles and keepers should be all right; the former should be made of the very best iron. In olden time, when all buckles were made of good wrought-iron and heavy, there was no danger; but now, when almost everything is made of cast-iron,—what they call malleable casting,—I do not consider any one very safe. True, if the pig from which the casting is made comes from a reliable ironmaster, and is made in a cold-blast charcoal furnace, and from a proper combination of magnetic and hematite ores, the casting may be as strong as necessary. But how is the buyer of a set of harness to know all this? It is impossible; therefore I recommend all gentlemen to buy from a good reliable maker, charging him to test every piece of iron he puts in, and be sure not to have his harness too light; it may at any time be subjected to a heavier strain than expected when made, and therefore it is better to have it always on the strong side. A very serious accident may occur from what one not accustomed to harness may think a most useless strap, and that is the outside belly-band; if it becomes unbuckled, or breaks going down a hill, what chance has a horse to hold back the vehicle? Not any; up go the shafts over his back as far as the

tugs will allow, and he has no control of the wagon at all; it comes on his heels necessarily, and what follows? Either a kicking scrape, upset, run away, or smash-up generally. Very few attach any importance to this strap, therefore I mention it.

Again: a gentleman driving his wife and family (within a few days), although everything was new, at the top of a long hill, going slowly down, the hook, or connecting iron between the saddle and crupper, broke,—the iron broke, it was fastened to the saddle by a rivet one-eighth of an inch thick—that was made of cast-iron, and having an unseen flaw, broke; consequence, breeching dropped on the horse's heels; then he commenced to kick and run, and the whole family were more or less injured,—the lady, it is feared, will never recover. I mention this to show the importance of having reliable tackle; without it you are never safe, especially in a hilly country. A good plan is to have two short straps from back strap attached to the side of your saddle; in that case, if rivet or anything about it breaks, the straps keep all in place.

TO KEEP HARNESS OR BRIDLES IN ORDER.

They should be wiped off with a damp sponge every morning, and then with a sponge filled with the heavy suds of Castile soap (I don't mean the light soap-suds); squeeze that out and rub more soap in the sponge, until the suds are thick; rub or polish all the leather over with that, especially in and about all the buckles and billets (all over), it will give the leather a nice polish, and keep it soft. Twice a year harness should be greased with neat's-foot oil, if to be had; if not, whale oil (sperm). Of bits, stirrups, and spurs: if of steel, wipe dry after use, and rub with an oiled rag, sweet oil; if of brass, use rotten-stone and any acid.

CONCLUSION.

In fine, taking leave of my readers, I hope they have ere this discovered that in penning the foregoing hints I have been throughout impelled by the hope, slight though it may be, of ameliorating the condition of the noblest animal that God has given to man; and I shall be amply repaid for the little trouble if my lady and gentlemen owners and riders will personally attend to their horses' welfare and comfort. In fact, these remarks are intended for all owners of horses; let them satisfy themselves, and not trust to the views of the ignorant; by doing so, great pleasure will accrue to themselves in the use of their horses and a comfortable enjoyment in the reflection that they have not neglected, but, on the contrary, have endeavored to deal justly by them.

Very cordially your obedient servant,

THE HORSE'S FRIEND.

THE END

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ERRATA.

Page 22, line 15 from top, read comma after "two;" and for "of," read "or."

Page 23, line 17 from top, for "pole," read "poll."

Page 68, line 3 from bottom, between "gait" and "should" read "for several days."

Page 80, line 14 from top, for "feet," read "feed."

Page 81, line 15 from top, for "pains," read "joins."

Page 127, line 24 from top, for "ten," read "two."

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